

Caroline Kelly
Office of Climate, Licensing & Resource Use,
Environmental Protection Agency,
P.O.Box 3000,
Johnstown Castle Estate,
County Wexford.

28/04/2009

Attn: Caroline Kelly

**Subject: Belturbet Waste Water Treatment Plant
Waste Water Discharge Licence
Register Number D0084-01**

Dear Ms Kelly,

I refer to the your letter dated 16th January 2009 of the request for further information regarding above Waste Water Discharge Licence Application for Belturbet Agglomeration.

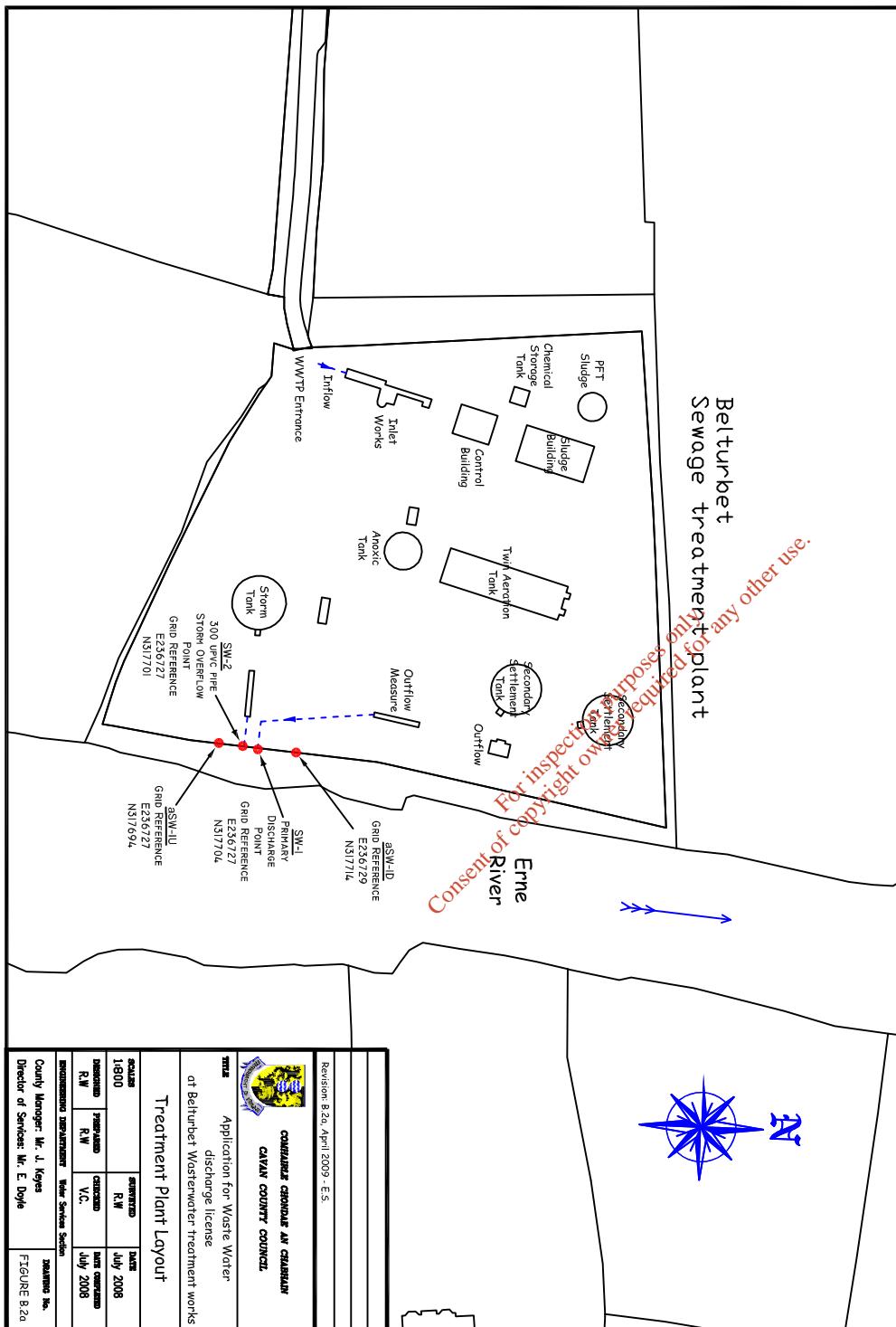
I note the contents of **ARTICLE 16 COMPLIANCE REQUIREMENTS**
In accordance with regulation 18(3)(b) and set out information as requested.

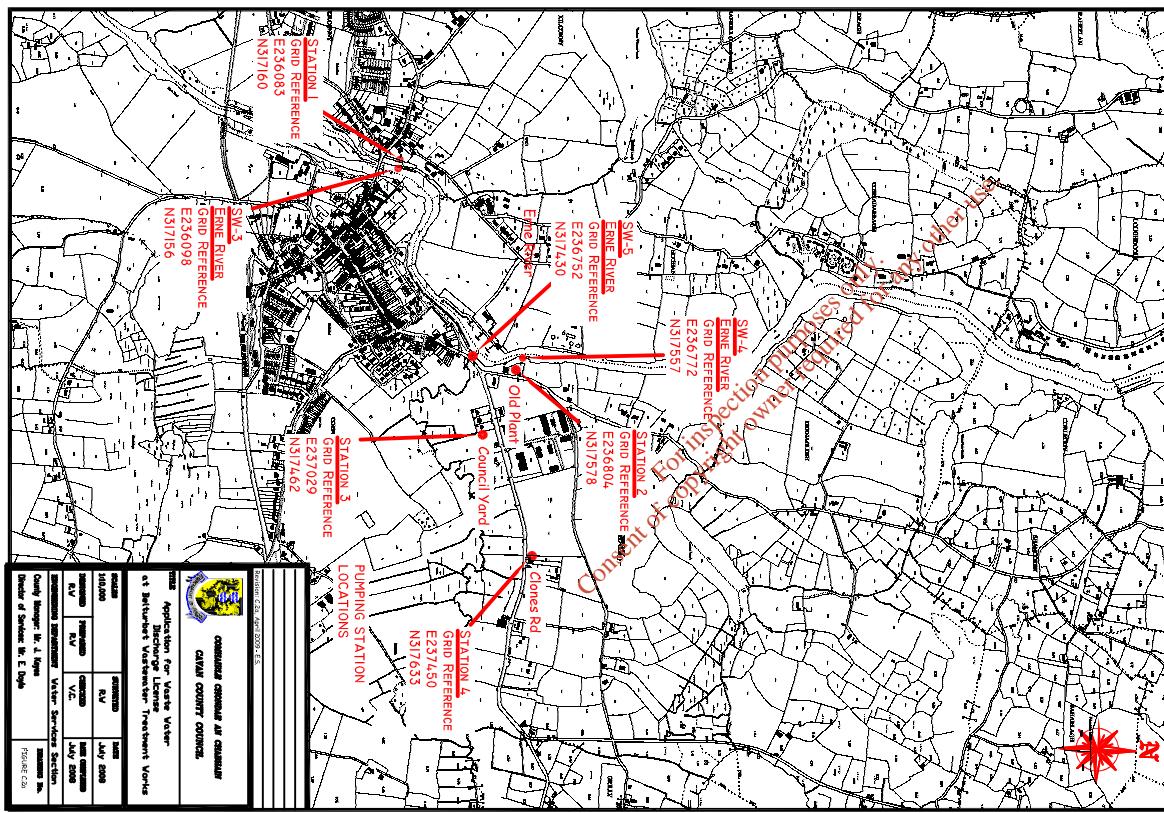
Section B.3 location of Primary Discharge Point

See figure B.2a for the primary discharge point which is the same point as the sample location.

Section B.5 location of Storm Water Overflow Point

See figure B.2a for storm water overflow point SW-2.





Section B.9(ii) Pending Development

Table 5. Catchment Population and Trends

Description	Census Figures	Census Figures	Census Figures	Estimated
Year	1996	2002	2006	2014
Resident Domestic Population	1,469	1,516	1,774	3550

- 1 The number of dwellings granted in the Belturbet Area in the Years 2006 to 2008 by the Planning Department are 51 which equates to a p.e. of 153.
- 2 The percentage of the projected p.e. to be contributed by the non-domestic activities is approximately 10%.
- 3 The resultant P.E. of Belturbet if the above developments were completed would be 2439, that is at the existing design capacity of the Belturbet Waste Water Works of 4000p.e.
From Table 5 the population projection for 2014 is 3550
And is within the proposed design capacity of the Belturbet Waste Water Works.

Compliance with Section 43 of the Regulations

The existing Waste water works of capacity 4000 P.E. will ensure that the objectives of all the directives are met up to the year 2014.
A review of the estimated population in year 2014 would be assessed for a potential upgrade of the Plant in order to comply with all the Directives.

Section C.1.1

There are no storm water overflows in the network system.
There is a storm water flow at the Treatment Plant from the existing storm water tank, the unique reference point for the storm water overflow discharge point code is SW-2.
see figure B.2a

Belturbet Town Pumping Stations

Station	Location	Grid Reference	Pump Capacity M3	Discharge Out fall Grid Reference
1	Erne River	E 236083 N 317160	28.26	E 236098 N 317156
2	Old Plant, Creeny	E 236804 N 317578	*302.00	E 236772 N 317557
3	Council Yard	E 237029 N 317462	14.0	E 236752 N 317450
4	Clones Rd	E 237450 N 317633	9.4	E 236752 N 317450

260* m3 storm overflow tank.

Table 4a: capacity and outfall location of pumping stations

This Table 4a supersedes Table 4 in section C.1.2 in the original application.

Section C.2

See figure C.2a of emergency overflow discharge points with reference codes and national grid codes and table 4a.

Section D.1 :

See web based link for this section.

Section D.2 :

SEE Discharge SW-1 Details in web based file

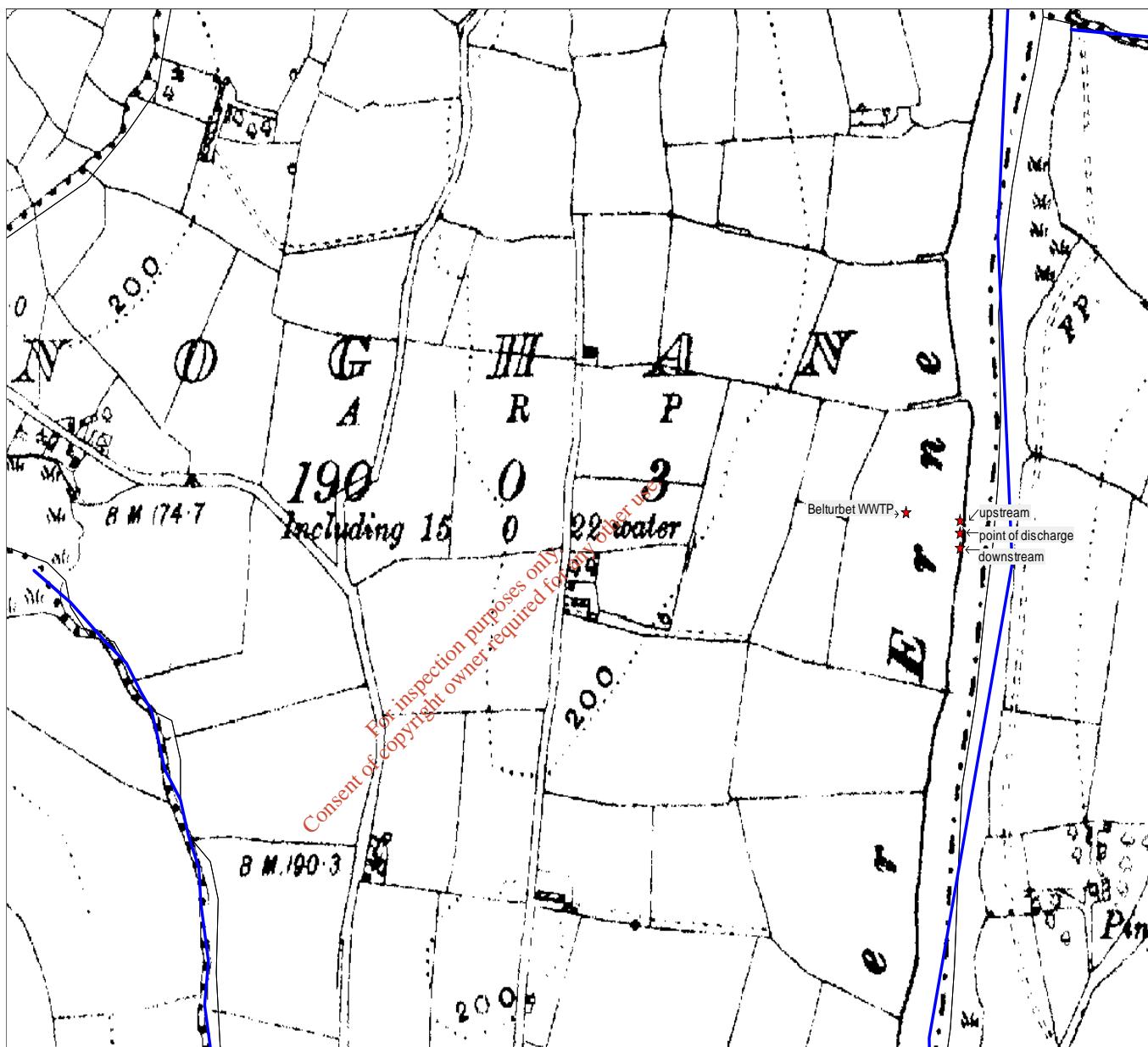
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Section E.2 :

Belturbet

Monitoring and sampling points:



- Belturbet STW is sampled on a bi-monthly basis for the parameters BOD, COD, Suspended Solids, Ammonia and Total Phosphorus.
- Grab samples are taken of the effluent .
- Upstream and downstream points are accessible.
- Samples are analysed in the Environment sections laboratory at Cullies
- The laboratory is accredited to ISO17025 and as such has a documented quality system.
- This system ensures that there is effective equipment calibration and maintenance, data recording and reporting.
- This ensures that results reported are accurate.

Section E.4 :

See Spread sheet enclosed.

F.1

- Given the design and location of the Sewerage treatment plant it is unlikely that any odour or noise emissions from the plant will have a significant impact on the surrounding area.
- The existing receiving water is the Erne. Water is sampled at Kilconny bridge upstream of the discharge on a regular basis. This station has an EPA biological rating of 3-4 see tables below.
- This river is not assigned as sensitive waters

Erne

Station Number	Station Location	Q'93	Q'97	Q'98	Q'01	Q'04	Q'07
1300	Bakers bridge	-	-	-	3-4	3-4	3-4
1400	Br at Kilconny, Belturbet (RHS)	3-4	3	3	3	3-4	3-4
1410	Kilconny, Belturbet (LHS)	-	-	3	1	1	-

MRP results

Station	1999 Med (μ g P/I)	2000 Med (μ g P/I)	2001 Med (μ g P/I)	2002 Med (μ g P/I)	2003 Med (μ g P/I)	2004 Med (μ g P/I)	2005 Med (μ g P/I)	2006 Med (μ g P/I)	2007 Med (μ g P/I)	Baseline Q-rating	Target P (μ g P/L)	2007 median Chemical
1300	40	23	27	26	23	29	39	51	63	-	-	Class C
1400	37	21	36	27	30	37	42	44	62	3	50	Class B

- The risk of emissions of the main polluting substances (as defined in the Dangerous substances Regulations SI No. 12 of 2001) from Belturbet STW impairing the environment is low. However there is the potential for fluoride in excess of the dangerous substances regs. limit being discharged.
- No water abstraction points exist downstream of this discharge in County Cavan.
- There are no areas designated for the protection of economically significant aquatic species (fish, shellfish) downstream of this location in County Cavan
- There are no areas designated as recreational and bathing waters downstream of this location in County Cavan
- There are no areas designated as nutrient sensitive areas downstream of this location in County Cavan
- Discharges, either from the waste water works or in proximity to the waste water works, are not likely to have a significant effect on any European site. There is a European site(SPA or SAC) downstream of the waste water works within county Cavan in the form of an SAC however because there is significant dilution and good quality effluent.
- There is no specific correspondence from the National Parks and Wildlife Service in relation to a European site, and this waste water treatment works.
- There are no Sensitive areas or areas of special interest within 2 kilometres of the emission point which could be affected by the emission.

Section F.2:

No water abstraction points exist downstream of this discharge in County Cavan.

Water Services Section
Cavan County Council
Courthouse
Farnham Street
Cavan
Co. Cavan

EntityName	StationName	SamplePurpose	SampleLabCode	SampleDate	Ammonia(N)mg/l	Arsenic ug/l
Belturbet	Influent	Discharge Licence - Municipal WWTP	08210746	8/12/2008	5.39	<0.96
Belturbet	Effluent	Discharge Licence - Municipal WWTP	08210744	8/12/2008	<0.09	<0.96
Belturbet	Upstream disc	Discharge Licence - Municipal WWTP	08210743	8/12/2008	0.24	<0.96
Belturbet	Downstream d	Discharge Licence - Municipal WWTP	08210745	8/12/2008	<0.09	<0.96
Belturbet	Effluent	WWTP - Process Control	07211355	11/1/2007	0.045	
Belturbet	Effluent	WWTP - Process Control	07211403	11/13/2007	0.169	
Belturbet	Effluent	WWTP - Process Control	08210087	2/12/2008	0.035	
Belturbet	Effluent	WWTP - Process Control	08210219	4/8/2008	0.031	
Belturbet	Effluent	WWTP - Process Control	08210436	6/4/2008	0.072	
Belturbet	Effluent	WWTP - Process Control	08210629	7/15/2008	0.081	

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EntityName	StationName	SamplePurpose	SampleLabCode	SampleDate	Ammonia(N)mg/l	Arsenic ug/l
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Belturbet	Downstream c	Discharge Licence - Municipal WWTP	08210745	8/12/2008	<0.09	<0.96
Belturbet	Effluent	WWTP - Process Control	07211355	11/1/2007	0.045	
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Belturbet	Effluent	WWTP - Process Control	08210629	7/15/2008	0.081	

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Atrazine ug/l	Barium ug/l	BOD mg/l	Boron ug/l	Cadmium ug/l	Chromium ug/l	COD mg/l	Conductivity @ 25°C	Copper ug/l	Cyanide ug/l
<0.01	32	8	<4.2	<0.09	<0.93	41	596	13	<5
<0.01	20.9	<2	<4.2	<0.09	<0.93	7	507	4	<5
<0.01	25.9	<2	<4.2	<0.09	<0.93	34	234	4	<5
<0.01	27.1	<2	<4.2	<0.09	1.3	32	237	5	<5
		4				24			
		3				33			
		4				44			
		4				26			
		4				40			
		<2				25			
Excel file labelled Belburbet Table E.4									

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Atrazine ug/l	Barium ug/l	BOD mg/l	Boron ug/l	Cadmium ug/l	Chromium ug/l	COD mg/l	Conductivity @ 25°C	Copper ug/l	Cyanide ug/l
<0.01	32	8	<4.2	<0.09	<0.93	41	596	13	<5
<0.01	20.9	<2	<4.2	<0.09	<0.93	17	507	4	<5
<0.01	25.9	<2	<4.2	<0.09	<0.93	34	234	4	<5
<0.01	27.1	<2	<4.2	<0.09	1.3	32	237	5	<5
		4				24			
		3				33			
		4				44			
		4				26			
		4				40			
		<2				25			

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Dichloromethane ug/l	Fluoride mg/l	Kjeldahl Nitrogen mg/l	Lead ug/l	Mercury ug/l	Nickel ug/l	Nitrates(N) mg/l	Nitrites(N) mg/l	Ortho-phosphate mg/l
<1	0.37	7.28	1.4	<0.2	0.8	<0.09	0.031	0.248
<1	1.4	<1	1.4	<0.2	<0.47	4.97	0.027	0.158
<1	0.16	1.12	0.4	<0.2	1.4	0.4	0.015	0.089
<1	0.16	1.12	0.8	<0.2	2.5	0.38	0.018	0.074
							0.05	
							<0.05	
							0.083	
							NT	
							NT	
							NT	

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Dichloromethane ug/l	Fluoride mg/l	Kjeldahl Nitrogen mg/l	Lead ug/l	Mercury ug/l	Nickel ug/l	Nitrates(N) mg/l	Nitrites(N) mg/l	Ortho-phosphate mg/l	

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pH (pHunits)	Phenols ug/l	Selenium ug/l	Simazine ug/l	Sulphate mg/l	Suspended Solids mg/l	Toluene ug/l	Total Nitrogen mg/l	Total Oxidised Nitrogen(N)
7.2	<0.1	1	<0.01	77.83	20	<1	7.28	<0.03
7.2	<0.1	1	<0.01	75.52	<3	<1	5	5
7.6	<0.1	1	<0.01	25.5	<3	<1	1.53	0.41
7.5	<0.1	1	<0.01	25.93	<3	<1	1.52	0.4
6.93					12			
7.29					<10			
6.94					25			
7.02					10			
7					10			
7.15					<10			

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pH (pHunits)	Phenols ug/l	Selenium ug/l	Simazine ug/l	Sulphate mg/l	Suspended Solids mg/l	Toluene ug/l	Total Nitrogen mg/l	Total Oxidised Nitrogen(N)
7.2	<0.1		1	<0.01	77.83	20	<1	7.28
7.2	<0.1		1	<0.01	75.52	<3	<1	5
7.6	<0.1		1	<0.01	25.5	<3	<1	1.53
7.5	<0.1		1	<0.01	25.93	<3	<1	0.41
6.93						12		0.4
7.29						<10		
6.94						25		
7.02						<10		
7						10		
7.15						<10		

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pH (pHunits)	Phenols ug/l	Selenium ug/l	Simazine ug/l	Sulphate mg/l	Suspended Solids mg/l	Toluene ug/l	Total Nitrogen mg/l	Total Oxidised Nitrogen(N)

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Total Phosphorus mg/l	Tributyltin(as Sn) ug/l	Xylene ug/l	Zinc ug/l
1.033	<0.02	<1	15.7
0.158	<0.02	<1	21.2
0.156	<0.02	<1	<4.6
0.134	<0.02	<1	<4.6
NT			
0.055			
0.142			
0.097			
0.09			
0.185			

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Total Phosphorus mg/l	Tributyltin(as Sn) ug/l	Xylene ug/l	Zinc ug/l
1.033	<0.02	<1	15.7
0.158	<0.02	<1	21.2
0.156	<0.02	<1	<4.6
0.134	<0.02	<1	<4.6
NT			
0.055			
0.142			
0.097			
0.09			
0.185			

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Total Phosphorus mg/l	Tributyltin(as Sn) ug/l	Xylene ug/l	Zinc ug/l

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Agglomeration details

Leading Local Authority	Cavan County Council
Co-Applicants	
Agglomeration	belturbet waste water works
Population Equivalent	2236
Level of Treatment	primary, secondary with phosphate removal
Treatment plant address	Noghan Belturbet County Cavan
Grid Ref (12 digits, 6E, 6N)	236727 / 317704
EPA Reference No:	D0084-01

Contact details

Contact Name:	Vincent craig
Contact Address:	Courthouse Farnham Street Cavan
Contact Number:	049 4378450
Contact Fax:	049 4331931
Contact Email:	v.craig@cavancoco.ie

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

Discharge Point Code: SW-1

Local Authority Ref No:	SW1						
Source of Emission:	effluent						
Location:	Noghan,Belturbet						
Grid Ref (12 digits, 6E, 6N)	236727 / 317704						
Name of Receiving waters:	River Enre						
Water Body:	River Water Body						
River Basin District	North Western IRBD						
Designation of Receiving Waters:	none						
Flow Rate in Receiving Waters:	<table border="1"> <tr> <td>0.15</td> <td>$\text{m}^3.\text{sec}^{-1}$</td> <td>Dry Weather Flow</td> </tr> <tr> <td>1.56</td> <td>$\text{m}^3.\text{sec}^{-1}$</td> <td>95% Weather Flow</td> </tr> </table>	0.15	$\text{m}^3.\text{sec}^{-1}$	Dry Weather Flow	1.56	$\text{m}^3.\text{sec}^{-1}$	95% Weather Flow
0.15	$\text{m}^3.\text{sec}^{-1}$	Dry Weather Flow					
1.56	$\text{m}^3.\text{sec}^{-1}$	95% Weather Flow					
Additional Comments (e.g. commentary on zero flow or other information deemed of value)							

Emission Details:

(i) Volume emitted			
Normal/day	510 m^3	Maximum/day	2700 m^3
Maximum rate/hour	112.5 m^3	Period of emission (avg)	60 min/hr 24 hr/day 365 day/yr
Dry Weather Flow	0.0104 m^3/sec		

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Table D.1(i)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of The Emission
(Primary Discharge Point)

Discharge Point Code: SW-1

Substance	As discharged			
	Unit of Measurement	Sampling Method	Max Daily Avg.	kg/day
pH	pH	Grab	= 7.29	
Temperature	°C	Grab	= 10.4	
Electrical Conductivity (@ 25°C)	µS/cm	Grab	= 507	
Suspended Solids	mg/l	Grab	= 25	67.5
Ammonia (as N)	mg/l	Grab	= 0.169	0.4563
Biochemical Oxygen Demand	mg/l	Grab	= 4	10.8
Chemical Oxygen Demand	mg/l	Grab	= 44	118.8
Total Nitrogen (as N)	mg/l	Grab	= 5	13.5
Nitrite (as N)	mg/l	Grab	= 0.027	0.0729
Nitrate (as N)	mg/l	Grab	= 4.97	13.419
Total Phosphorous (as P)	mg/l	Grab	> 0.185	0.4995
OrthoPhosphate (as P)	mg/l	Grab	= 0.083	0.2241
Sulphate (SO ₄)	mg/l	Grab	= 75.52	203.904
Phenols (Sum)	µg/l	Grab	< 0.1	0.00027

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45µm filter paper

For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

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Table D.1(i)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS -
Characteristics of The Emission (Primary Discharge Point)

Discharge Point Code: SW-1

Substance	As discharged			
	Unit of Measurement	Sampling Method	Max Daily Avg.	kg/day
Atrazine	µg/l	Grab	< 0.01	0.000027
Dichloromethane	µg/l	Grab	< 1	0.0027
Simazine	µg/l	Grab	< 0.01	0.000027
Toluene	µg/l	Grab	< 1	0.0027
Tributyltin	µg/l	Grab	< 0.02	0.000054
Xylenes	µg/l	Grab	< 1	0.0027
Arsenic	µg/l	Grab	< 0.96	0.002592
Chromium	µg/l	Grab	< 0.93	0.002511
Copper	µg/l	Grab	= 4	0.0108
Cyanide	µg/l	Grab	< 5	0.0135
Flouride	µg/l	Grab	= 0.28	0.000756
Lead	µg/l	Grab	= 1.4	0.00378
Nickel	µg/l	Grab	< 0.47	0.001269
Zinc	µg/l	Grab	= 21.2	0.05724
Boron	µg/l	Grab	< 4.2	0.01134
Cadmium	µg/l	Grab	< 0.09	0.000243
Mercury	µg/l	Grab	< 0.2	0.00054
Selenium	µg/l	Grab	= 1	0.0027
Barium	µg/l	Grab	= 20.9	0.05643

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45µm filter paper

For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

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

Discharge Point Code: SW-2

Local Authority Ref No:	Storm tank	
Source of Emission:	Storm water and preliminary settled waste water in	
Location:	Belturbet Waste Water Treatment Plant	
Grid Ref (12 digits, 6E, 6N)	236727 / 317701	
Name of Receiving waters:	River Erne	
Water Body:	River Water Body	
River Basin District	North Western IRBD	
Designation of Receiving Waters:	none	
Flow Rate in Receiving Waters:	0.15	$\text{m}^3.\text{sec}^{-1}$ Dry Weather Flow
	1.56	$\text{m}^3.\text{sec}^{-1}$ 95% Weather Flow
Additional Comments (e.g. commentary on zero flow or other information deemed of value)		

Emission Details:

(i) Volume emitted		
Normal/day	432 m^3	Maximum/day
Maximum rate/hour	36 m^3	Period of emission (avg)
Dry Weather Flow	0 m^3/sec	60 min/hr 12 hr/day 3 day/yr

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TABLE E.1(i): WASTE WATER FREQUENCY AND QUANTITY OF DISCHARGE – Primary and Secondary Discharge Points

Identification Code for Discharge point	Frequency of discharge (days/annum)	Quantity of Waste Water Discharged (m³/annum)
SW-1	365	186150

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TABLE E.1(ii): WASTE WATER FREQUENCY AND QUANTITY OF DISCHARGE – Storm Water Overflows

Identification Code for Discharge point	Frequency of discharge (days/annum)	Quantity of Waste Water Discharged (m³/annum)	Complies with Definition of Storm Water Overflow
SW-2	3	1296	Yes

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TABLE F.1(i)(a): SURFACE/GROUND WATER MONITORING

Primary Discharge Point

Discharge Point Code:	SW-1
MONITORING POINT CODE:	aSW-1d
Grid Ref (12 digits, 6E, 6N)	236727 / 317694

Parameter	Results (mg/l)				Sampling method	Limit of Quantitation	Analysis method / technique
	12/08/08	23/03/09					
pH	= 7.5				Grab		ELECTROMETER
Temperature		= 10.3			Grab	0	not tested
Electrical Conductivity (@ 25°C)	= 237				Grab	0.5	ELECTROMETER
Suspended Solids	< 3				Grab	2	FILTRATION
Ammonia (as N)	< 0.09				Grab	0.01	COLORIMETRY
Biochemical Oxygen Demand	< 2				Grab	2	
Chemical Oxygen Demand	= 32				Grab	5	COLORIMETRY
Dissolved Oxygen		= 9.77			Grab	2	not tested
Hardness (as CaCO ₃)		= 161.7			Grab	0.4	not tested
Total Nitrogen (as N)	= 1.52				Grab	1	COLORIMETRY
Nitrite (as N)	= 0.018				Grab	0.003	COLORIMETRY
Nitrate (as N)	= 0.38				Grab	0.09	COLORIMETRY
Total Phosphorous (as P)	= 0.134				Grab	0.009	COLORIMETRY
OrthoPhosphate (as P)	= 0.074				Grab	0.004	COLORIMETRY
Sulphate (SO ₄)	= 25.93				Grab	1.39	COLORIMETRY
Phenols (Sum)	> 0.1				Grab	0.1	GC-MS

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45µm filter paper

For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

Additional Comments:	
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TABLE F.1(i)(b): SURFACE/GROUND WATER MONITORING (Dangerous Substances)

Primary Discharge Point

Discharge Point Code:	SW-1
MONITORING POINT CODE:	aSW-1d
Grid Ref (12 digits, 6E, 6N)	236727 / 317694

Parameter	Results ($\mu\text{g/l}$)				Sampling method	Limit of Quantitation	Analysis method / technique
	12/08/08						
Atrazine	< 0.01				Grab	0.01	HPLC
Dichloromethane	< 1				Grab	1	GCMS
Simazine	< 0.01				Grab	0.01	HPLC
Toluene	< 1				Grab	1	GC-MS
Tributyltin	< 0.02				Grab	0.02	
Xylenes	< 1				Grab	1	GC-MS
Arsenic	< 0.96				Grab	0.96	ICPMS
Chromium	= 1.3				Grab	0.93	
Copper	= 5				Grab	0.5	
Cyanide	< 5				Grab	5	COLORIMETRY
Flouride	= 0.16				Grab	0.09	COLORIMETRY
Lead	= 0.8				Grab	0.38	ICPMS
Nickel	= 2.5				Grab	0.47	ICPMS
Zinc	< 15.5				Grab	4.6	ICPMS
Boron	< 4.2				Grab	0.004	ICPMS
Cadmium	< 0.09				Grab	0.09	ICPMS
Mercury	< 0.2				Grab	0.2	ICPMS
Selenium	= 1				Grab	0.74	ICPMS
Barium	= 27.1				Grab	0.74	ICPMS

Additional Comments:	
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Consent of copy right owner required for any other use.

TABLE F.1(i)(a): SURFACE/GROUND WATER MONITORING

Primary Discharge Point

Discharge Point Code:	SW-1
MONITORING POINT CODE:	aSW-1u
Grid Ref (12 digits, 6E, 6N)	236727 / 317694

Parameter	Results (mg/l)				Sampling method	Limit of Quantitation	Analysis method / technique
	12/08/08	23/03/09					
pH	= 7.6				Grab		ELECTROMETER
Temperature		= 10.2			Grab	0	Probe
Electrical Conductivity (@ 25°C)	= 234				Grab	0.5	ELECTROMETER
Suspended Solids	< 3				Grab	2	FILTRATION
Ammonia (as N)	= 0.24				Grab	0.01	COLORIMETRY
Biochemical Oxygen Demand	< 2				Grab	2	DO probe
Chemical Oxygen Demand	= 34				Grab	5	COLORIMETRY
Dissolved Oxygen		= 9.71			Grab	2	DO probe
Hardness (as CaCO ₃)		= 164.33			Grab	0.4	Colorimetry
Total Nitrogen (as N)	= 1.53				Grab	1	digestion
Nitrite (as N)	= 0.015				Grab	0.003	COLORIMETRY
Nitrate (as N)	= 0.4				Grab	0.09	COLORIMETRY
Total Phosphorous (as P)	= 0.156				Grab	0.009	COLORIMETRY
OrthoPhosphate (as P)	= 0.089				Grab	0.004	COLORIMETRY
Sulphate (SO ₄)	= 25.5				Grab	1.39	COLORIMETRY
Phenols (Sum)	< 0.1				Grab	0.1	GC-MS

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45µm filter paper

For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

Additional Comments:	
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TABLE F.1(i)(b): SURFACE/GROUND WATER MONITORING (Dangerous Substances)

Primary Discharge Point

Discharge Point Code:	SW-1
MONITORING POINT CODE:	aSW-1u
Grid Ref (12 digits, 6E, 6N)	236727 / 317694

Parameter	Results ($\mu\text{g/l}$)				Sampling method	Limit of Quantitation	Analysis method / technique
	12/08/08						
Atrazine	< 0.01				Grab	0.01	HPLC
Dichloromethane	< 1				Grab	1	GC-MS
Simazine	< 0.01				Grab	0.01	HPLC
Toluene	< 1				Grab	1	GC-MS
Tributyltin	< 0.02				Grab	0.02	
Xylenes	< 1				Grab	1	GC-MS
Arsenic	< 0.96				Grab	0.96	ICPMS
Chromium	< 0.93				Grab	0.93	ICPMS
Copper	= 4				Grab	0.5	ICPMS
Cyanide	< 5				Grab	5	COLORIMETRY
Flouride	= 0.16				Grab	0.09	COLORIMETRY
Lead	= 0.4				Grab	0.38	ICPMS
Nickel	= 1.4				Grab	0.47	ICPMS
Zinc	< 4.6				Grab	4.6	ICPMS
Boron	< 4.2				Grab	4	ICPMS
Cadmium	< 0.09				Grab	0.09	ICPMS
Mercury	< 0.2				Grab	0.2	ICPMS
Selenium	= 1				Grab	0.74	ICPMS
Barium	= 25.9				Grab	0.74	ICPMS

Additional Comments:	
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Consent of copy right owner required for any other use.

Annex 2: Check List For Regulation 16 Compliance

Regulation 16 of the waste water discharge (Authorisation) Regulations 2007 (S.I. No. 684 of 2007) sets out the information which must, in all cases, accompany a discharge licence application. In order to ensure that the application fully complies with the legal requirements of regulation 16 of the 2007 Regulations, all applicants should complete the following.

In each case, refer to the attachment number(s), of your application which contains(s) the information requested in the appropriate sub-article.

Regulation 16(1) In the case of an application for a waste water discharge licence, the application shall -	Attachment Number	Checked by Applicant
(a) give the name, address, telefax number (if any) and telephone number of the applicant (and, if different, of the operator of any treatment plant concerned) and the address to which correspondence relating to the application should be sent and, if the operator is a body corporate, the address of its registered office or principal office,	B1	Yes
(b) give the name of the water services authority in whose functional area the relevant waste water discharge takes place or is to take place, if different from that of the applicant,	B1	Yes
(c) give the location or postal address (including where appropriate, the name of the townland or townlands) and the National Grid reference of the location of the waste water treatment plant and/or the waste water discharge point or points to which the application relates,	B2	Yes
(d) state the population equivalent of the agglomeration to which the application relates,	B9	Yes
(e) specify the content and extent of the waste water discharge, the level of treatment provided, if any, and the flow and type of discharge,	B3	Yes
(f) give details of the receiving water body, including its protected area status, if any, and details of any sensitive areas or protected areas or both in the vicinity of the discharge point or points likely to be affected by the discharge concerned, and for discharges to ground provide details of groundwater protection schemes in place for the receiving water body and all associated hydrogeological and geological assessments related to the receiving water environment in the vicinity of the discharge.	F1	Yes
(g) identify monitoring and sampling points and indicate proposed arrangements for the monitoring of discharges and, if Regulation 17 does not apply, provide details of the likely environmental consequences of any such discharges,	E2	Yes
(h) in the case of an existing waste water treatment plant, specify the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application,	E1	Yes
(i) describe the existing or proposed measures, including emergency procedures, to prevent unintended waste water discharges and to minimise the impact on the environment of any such discharges,	SECTION C	Yes
(j) give particulars of the nearest downstream drinking water abstraction point or points to the discharge point or points,	F2	Yes
(k) give details, and an assessment of the effects of any existing or proposed emissions on the environment, including any environmental medium other than those into which the emissions are, or are to be made, and of proposed measures to prevent or eliminate or, where that is not practicable, to limit any pollution caused in such discharges,	B5	Yes
(l) give detail of compliance with relevant monitoring requirements and treatment standards contained in any applicable Council Directives of Regulations,	E4	Yes
(m) give details of any work necessary to meet relevant effluent discharge standards and a timeframe and schedule for such work.	B10	Yes
(n) Any other information as may be stipulated by the Agency.		Yes
Regulation 16(3) Without prejudice to Regulation 16 (1) and (2), an application for a licence shall be accompanied by -	Attachment Number	Checked by Applicant
(a) a copy of the notice of intention to make an application given pursuant to Regulation 9,	B8	Yes
(b) where appropriate, a copy of the notice given to a relevant water services authority under Regulation 13,	NOT APPLICABLE	Yes
(c) Such other particulars, drawings, maps, reports and supporting documentation as are necessary to identify and describe, as appropriate -		Yes
(c) (i) the point or points, including storm water overflows, from which a discharge or discharges take place or are to take place, and	B5	Yes
(c) (ii) the point or points at which monitoring and sampling are undertaken or are to be undertaken,	B3	Yes
(d) such fee as is appropriate having regard to the provisions of Regulations 38 and 39.	B9	Yes

Regulation 16(4) An original application shall be accompanied by 2 copies of it and of all accompanying documents and particulars as required under Regulation 16(3) in hardcopy or in an electronic or other format as specified by the Agency.		Attachment Number	Checked by Applicant
1	An Original Application shall be accompanied by 2 copies of it and of all accompanying documents and particulars as required under regulation 16(3) in hardcopy or in electronic or other format as specified by the agency.	1 original 1 copy 1CD	Yes
Regulation 16(5) For the purpose of paragraph (4), all or part of the 2 copies of the said application and associated documents and particulars may, with the agreement of the Agency, be submitted in an electronic or other format specified by the Agency.		Attachment Number	Checked by Applicant
1	Signed original.	1 ORIGINAL	Yes
2	2 hardcopies of application provided or 2 CD versions of application (PDF files) provided.	1 hard copy 1CD*	Yes
3	1 CD of geo-referenced digital files provided.	*1 CD	Yes
Regulation 17 Where a treatment plant associated with the relevant waste water works is or has been subject to the European Communities (Environmental Impact Assessment) Regulations 1989 to 2001, in addition to compliance with the requirements of Regulation 16, an application in respect of the relevant discharge shall be accompanied by a copy of an environmental impact statement and approval in accordance with the Act of 2000 in respect of the said development and may be submitted in an electronic or other format specified by the Agency		Attachment Number	Checked by Applicant
3	2 CD versions of EIS, as PDF files, provided.	not applicable	Yes
1	EIA provided if applicable	not applicable	Yes
2	2 hardcopies of EIS provided if applicable.	not applicable	Yes

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