

Eimer Godsil
Inspector
Environmental Protection Agency
Office of Climate, Licensing & Resource Use
Environmental Licensing Programme
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28th March 2014

IW-ER-LT0008

Re: Rathcormac Waste Water Discharge Licence Application D0200-01

Dear Eimer Godsil,

In response to the EPA correspondence dated the 31st of January 2014 requesting clarification in relation to the response submitted to a request for further information in accordance with Section 18 of the Waste Water Discharge (Authorisation) Regulations 2007, Irish Water acknowledges the response issued by Cork County Council in relation to the Rathcormac waste water discharge licence application (D0200-01) was submitted on behalf of Irish Water.

Please note that all future correspondence in relation to this application should be addressed to Irish Water.

Best Regards,



Gerry Galvin

Chief Technical Advisor

Licensing Notice - Unsolicited Correspondence - 1 for Rathcormac Licence (D0200-01)

Licence: Rathcormac (D0200-01)

Status Reason: Closed

Issued On: 01/04/2014

Action Type: Licensing Notice

Status History Action: Unsolicited Correspondence

Rathcormac Unsolicited Correspondence

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Licensing Reply - Reg 18(3)(b) Reply Received - 3 for Rathcormac Licence (D0200-01)

Licence: Rathcormac (D0200-01)

Status Reason: Closed

Issued On: 10/01/2014

Action Type: Licensing Reply

Status History Action: Reg 18(3)(b) Reply Received

Dear Applicant

I refer to your application for a waste water discharge licence relating to agglomeration named Rathcormac.

Having examined the documentation submitted, I am to advise that the Agency is of the view that the documentation does not comply with Regulation 16 of the Waste Water Discharge (Authorisation) Regulations 2007, as amended.

You are therefore requested, in accordance with Regulation 18(3)(b) of the regulations, to take the steps to supply the information detailed below.

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REGULATION 16 COMPLIANCE REQUIREMENTS

Question	Confirm the date of commissioning of the current WWTP at Rathcormac. Indicate in particular if sand filtration, phosphorous removal and UV disinfection have been included in the treatment.
Associated Documents	
Response	See attached in connection with Rathcormac RIs 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, and 1879. Regards, Gillian O'Sullivan, Waste Water Liaison, Cork Co. Council.
Associated Documents	<ul style="list-style-type: none">Rathcormac WWDL D0200-01, EPA Licensing Action - Reg.

Question

Provide the effluent monitoring results for BOD, COD, suspended solids, orthophosphate and ammonia from the primary discharge for 2012 and 2013.

Associated Documents**Response**

See response attached to RI1869 above. Regards, Gillian O'Sullivan, Waste Water Liaison, Cork Co. Council.

Associated Documents**Question**

Provide any available ambient monitoring results upstream and downstream of the primary discharge for 2012 and 2013.

Associated Documents**Response**

See response attached to RI1869 above. Regards, Gillian O'Sullivan, Waste Water Liaison, Cork Co. Council.

Associated Documents**Question**

Provide a revised drawing clearly detailing the boundary of the agglomeration to which this application relates. Please note that the agglomeration boundary shall include all areas serviced by the sewer network and shall include the wastewater treatment plant. All areas of the agglomeration shall be within the agglomeration boundary.

Associated Documents**Response**

See response attached to RI1869 above. Regards, Gillian O'Sullivan, Waste Water Liaison, Cork Co. Council.

Associated Documents**Question**

Confirm the daily normal and daily maximum effluent volumes emitted from the primary discharge, expressed as m³/day.

Associated Documents**Response**

See response attached to RI1869 above. Regards, Gillian O'Sullivan, Waste Water Liaison, Cork Co. Council.

Associated Documents**Question**

Indicate the make-up of the influent load, including the percentage contributed by non-domestic (commercial, industrial, etc.) activities.

Associated Documents**Response**

See response attached to RI1869 above. Regards, Gillian O'Sullivan, Waste Water Liaison, Cork Co. Council.

Associated Documents**Question**

Provide details of the days and hours that a caretaker is in attendance or on-call at the plant.

Associated Documents**Response**

See response attached to RI1869 above. Regards, Gillian O'Sullivan, Waste Water Liaison, Cork Co. Council.

Associated Documents

Question

Provide details of the stormwater overflow at the plant, indicate

- number of storage tanks,
- capacity of storage tanks,
- where available, details on frequency of stormwater discharge.

Associated Documents**Response**

See response attached to RI1869 above. Regards, Gillian O'Sullivan, Waste Water Liaison, Cork Co. Council.

Associated Documents**Question**

Describe under what circumstances an overflow occurs for the overflow SW2 in the agglomeration. Confirm if this overflow is a storm water overflow or a secondary overflow. When replying bear in mind the definitions as outlined below:

- o Secondary Discharge: A potential, occasional or continuous discharge from the waste water works other than a primary discharge or a storm water overflow.
- o Stormwater Overflow: A structure or device on a sewerage system designed and constructed for the purpose of relieving the system of excess flows that arise as a result of rain water or melting snow in the sewer catchment, the excess flow being discharged to receiving waters.
- o Emergency overflows: Overflows whereby a power failure, essential maintenance or other similar interruption in normal operations results in a discharge of untreated waste water from the sump as a consequence of the pumps being disabled - discharges resulting from insufficient hydraulic capacity within the system are not regarded as emergency discharges.

Associated Documents**Response**

See response attached to RI1869 above. Regards, Gillian O'Sullivan, Waste Water Liaison, Cork Co. Council.

Associated Documents**Question**

Clarify the design population equivalent (p.e.) of the WWTP and the current p.e. served by the plant.

Associated Documents**Response**

See response attached to RI1869 above. Regards, Gillian O'Sullivan, Waste Water Liaison, Cork Co. Council.

Associated Documents**Question**

Provide an address for the location of the WWTP?

Associated Documents**Response**

See response attached to RI1869 above. Regards, Gillian O'Sullivan, Waste Water Liaison, Cork Co. Council.

Associated Documents

Your reply to this notice should include a revised non-technical summary which reflects the information you supply in compliance with the notice, insofar as that information impinges on the non-technical summary.

In the case where any drawings already submitted are subject to revision consequent on this request, a revised drawing should be prepared in each case. It is not sufficient to annotate the original drawing with a textual correction. Where such revised drawings are submitted, provide a list of drawing titles, drawing numbers and revision status, which correlates the revised drawings with the superseded versions.

Please supply the information by 10/01/2014. Please note that all maps/drawings should not exceed A3 in size.

Please direct any queries that you may have in relation to the above to the Inspector Eimer Godsil or to OCLR Admin Team E.

Yours sincerely

Environmental Licensing Programme

Office of Climate, Licensing & Resource Use

Tel: 053-9160600

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Comhairle Contae Chorcaí Cork County Council

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For Attention of: Ms Eimer Godsil

10th January, 2014

**Re: Licensing Action - Reg 18(3)(b) Notice Sent - 3 for Rathcormac
Licence (D0200-01)**

A Chara,

I refer to correspondence issued on 11/12/2013 in relation to the above. The attached report and appendices address the queries raised.

Is mise le meas,

Denis Beecher.

Executive Engineer.

Waste Water Pumping & Treatment Zone 4,

WATER SERVICES DIRECTORATE

Direct Tel: 022-21123

Email: denis.beecher@corkcoco.ie

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**Licensing Action – Reg. 18(3)(b) Notice Sent – 3 for Rathcormac.
Licence (D0200-01).**

Question 1.

Confirm the date of commissioning of the current WWTP at Rathcormac. Indicate in particular if sand filtration, phosphorous removal and UV dis-infection have been included in the treatment.

Response 1.

The current Rathcormac WWTP was commissioned in November 2009. The WWTP process initially included sand filtration and phosphorus removal. UV dis-infection is not included within the upgraded WWTP Process.

The sand filtration system at the WWTP is not currently operational and has not been operational since significant site flooding on 27th and 28th of June 2012. Cork County Council has recently commenced procurement for the upgrade and re-commissioning of the Sand Filtration System on site. The commencement of these works is subject to provision of adequate funding through Cork County Council / Irish Water.

Question 2.

Provide the effluent monitoring results for BOD, COD, suspended solids, ortho-phosphate and ammonia from the primary discharge for 2012 and 2013.

Response 2.

See attached Appendix A, containing effluent monitoring results for the primary discharge for 2012 and 2013.

Please note the analysis submitted contains results for cBOD, COD and suspended solids only as analysis for ortho-phosphate and ammonia was not necessary under the UWWTD.

Question 3.

Provide any available ambient monitoring results upstream and downstream of the primary discharge for 2012 and 2013.

Response 3.

See attached Appendix B, containing available Ambient Monitoring Data for both the Up-Stream and Down-Stream Monitoring Locations throughout 2012 and 2013.

Question 4.

Provide a revised drawing clearly detailing the boundary of the agglomeration to which this application relates. Please note that the agglomeration boundary shall include all areas serviced by the sewer network and shall include the wastewater treatment plant. All areas of the agglomeration shall be within the agglomeration boundary.

Response 4.

Drawing Number B1 – Map 5, Agglomeration Boundary Attachment B1 – Map 5 is currently being re-drafted and altered to include the WWTP within the agglomeration boundary. This will be forwarded to the EPA in separate correspondence on completion.

Question 5.

Confirm the daily normal and daily maximum effluent volumes emitted from the primary discharge, expressed as m³/day.

Response 5.

The current daily normal effluent volume emitted from the Primary Discharge is approximately 150 m³/day to 200 m³/day.

The sewer collection network is made up of combined sewers with some separate foul and storm network serving newer developments within the agglomeration. The combined nature of the sewer network results in increased flows during periods of wet weather.

The daily maximum effluent volume emitted from the Primary Discharge during 2013 was 1,440 m³ approx. comprised of both treated effluent and storm-water discharge from the on-site storm holding tank.

It should be noted that the WWTP is currently under-loaded and operating well below the design capacity and just two of the three SBR tanks in the WWTP are currently operational.

Question 6.

Indicate the make-up of the influent load, including the percentage contributed by non-domestic (commercial, industrial, etc.) activities.

Response 6.

The load to the WWTP is primarily domestic in make-up. There are no licensed industrial facilities discharging to the Wastewater Collection System. There are a number of commercial and other non-domestic wastewater sources within the village including the school, grocery shops, butcher shop, hairdressers, fast food outlets, public houses some of which also contain restaurants and a community hall.

The estimated make-up of the loading is as below;

Domestic	85%
Non-Domestic, Commercial & Other Activities as outlined above	15%

Question 7.

Provide details of the days and hours that a caretaker is in attendance or on-call at the plant.

Response 7.

Cork County Council employs a wastewater caretaker to operate the Rathcormac WWTP in addition to two other WWTP's in the area. The Caretaker is on duty from 08:30 to 17:00, Monday to Friday and also inspects the Rathcormac WWTP daily at weekends.

There are a number of alarm settings at the WWTP which notify the Caretaker of potentially serious plant malfunctions outside of these hours.

Question 8.

Provide details of the stormwater overflow at the plant, indicate

- *number of storage tanks,*
- *capacity of storage tanks,*
- *where available, details on frequency of stormwater discharge.*

Response 8.

There is a single storm water holding / overflow tank at the WWTP site with a capacity of 180 m³. In storm conditions all the influent to the site is screened prior to forwarding to the treatment process or alternatively to the storm holding tank on occasions where the treatment process has reached hydraulic capacity.

Storm water is held in the on site storm holding tank until such time as capacity is again available within the treatment process and the flows held in the storm tank are then return pumped for treatment. Should the volume of the on-site storm holding tank be exceeded the excess is decanted via an overflow baffle and is discharged from the WWTP via the Primary Discharge.

There has been discharge from the storm holding tank on 16 days throughout 2013 representing approximately 9 storm events.

Question 9.

Describe under what circumstances an overflow occurs for the overflow SW2 in the agglomeration. Confirm if this overflow is a storm water overflow or a secondary overflow. When replying bear in mind the definitions as outlined below;

- *Secondary Discharge: A potential, occasional or continuous discharge from the wastewater works other than a primary discharge or a storm water overflow.*
- *Stormwater Overflow: A structure or device on a sewerage system designed and constructed for the purpose of relieving the system of excess flows that arise as a result of rain water or melting snow in the sewer catchment, the excess flow being discharged to receiving waters.*
- *Emergency Overflows: Overflows whereby a power failure, essential maintenance or other similar interruption in normal operations results in a discharge of untreated waste water from the sump as a consequence of the pumps being disabled – discharges resulting from insufficient hydraulic capacity within the system are not regarded as emergency discharges.*

Response 9.

SW2 is located at a pumping station on the waste water collection network. The pumping station is comprised of control building, an inlet line, in line macerator and bypass facility, wet well pump sump containing 2 no. pumps and rising main to the gravity sewer from where flows are gravitated to the WWTP. The overflow SW2 is located at a high level within the pump sump and is baffled to prevent the discharge of gross solids to the receiving water. Furthermore the pumping station control building contains generator to allow for operation of the system during extended periods of localised power loss.

The 2 No. wastewater pumps located within the pump sump are operated on a duty / assist basis with the duty pump being supplemented by the assist pump in times of large influent flow as a result of storm conditions.

An overflow can occur from SW2 under the following conditions;

1. Power loss to the site and overflow prior to the on-site generator being activated. Note the on site generator has to be activated manually.
2. Failure of the in-line macerator leading to ragging blockage of both the duty and assist pumps may lead to a build up of influent at the pump sump and overflow at SW2.
3. Storm conditions, leading to a large influent flow containing storm water to the pump sump. If the influent flow is in excess of the potential pumped flow from the wastewater pumps operating on a duty / assist basis and the storage capacity of the pump sump is exceeded, the excess storm flows will be discharged via SW2.

Discharge at SW2 has not taken place as a result of conditions at 1 and 2 above throughout 2013. The most likely conditions encountered that may lead to discharge at SW2 are storm conditions as per 3 above.

Hence the overflow at SW2 should be classified as a Storm Overflow and potentially also as an Emergency Overflow for conditions 1 and 2 above.

Question 10.

Clarify the design population equivalent (p.e.) of the WWTP and the current p.e. served by the plant.

Response 10.

The design population of Rathcormac WWTP is 4,000 p.e.
The current p.e. served by the plant based on biological assessment of inlet loading throughout 2013 is approximately 800 to 1,000 p.e.

Question 11.

Provide an address for the location of the WWTP?

Response 11.

The address of the WWTP is Bridgeland East, Rathcormac, Co. Cork.
The non-technical summary has been revised to reflect the above responses and also to include the alterations made to the WWTP in upgrade works completed since

the original application was made. The revised non-technical summary is contained within Appendix C.

The Agglomeration Boundary Drawing is currently being revised in accordance with the requirements of Question 4 above. On completion of same the revised drawing together with Drawing Schedule to reflect the alterations made will be forwarded to the EPA.

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Appendix A – Primary Discharge Effluent Monitoring Results 2012 & 2013.

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Rathcormac 2012 WWTP Outlet							Mean value	UWW Reg Limits
Sample	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent		
Sample Code	GW008	GW134	GW304	GW331	GW473	GW712		
Sample Date	18/01/2012	15/03/2012	26/04/2012	09/05/2012	20/06/2012	21/08/2012		
Sample Type	Composite	Composite	Composite	Composite	Composite	Composite		
Flow M ³ /Day	*	155	*	*		178		
BOD mg/L	6.9	159	9	15	20	6	36.0	25
COD mg/L	235	644	60	75	84	29	188	125
Suspended Solids mg/L	130	316	14	26	60	9	93	35

 exceeds Urban Wastewater Regulations Limits

 half of LOD for statistical purposes

Rathcormac 2013 WWTP Outlet													Mean value	UWW Reg Limits
Sample	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent		
Sample Code	GX064	GX192	GX500	GX710	GX858	MX383	GX1042	GX1092		GX1321	GX1356	GX1414		
Sample Date	31/01/2013	05/03/2013	21/05/2013	09/07/2013	08/08/2013	17/09/2013	18/09/2013	02/10/2013	05/11/2013	26/11/2013	03/12/2013	11/12/2013		
Sample Type	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite		
Flow M ³ /Day	256		*	*	*	*	*	*	*	*	*	*		
BOD mg/L	15.0	183.0	146.0	17.0	5.7	74.0	35.0	5.0	12.8	20.0	62.0	59.0	52.9	25
COD mg/L	44	683	494	89	57	592	180	38	79	76	259	251	237	125
Suspended Solids mg/L	11	435	317	27	6	350	87	4	31	50	181	167	139	35

 exceeds Urban Wastewater Regulations Limits

 half of LOD for statistical purposes

Appendix B – Ambient Monitoring Data 2012 & 2013.

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18B050300 grid 180822/90620

Parameter	Molybdate Reactive Phosphorous	Chloride	Ammonium	Conductivity @ 20 oC	Dissolved Oxygen % Saturation	Dissolved Oxygen	Nitrate	Nitrite	pH	BOD	Temperature	Total Nitrogen			
	P	Cl	NH4			O2	NO3	NO2		O2		N			
Max.	0.03	--	0.5	--	150	15	25	0.05	9	5	--	--			
Entity	Station	Sample Re	Sample Date	Analyst Cor	mg/l	mg/l	mg/l	µS/cm	% O2	mg/l	mg/l	pH units	mg/l	Degrees C	mg/l
Bride	Rathcormack br	2011/0076	20-Jan-11	-	0.011		0.01	153		16.75	< 0.013	7.3	1.3	5.5	
Bride	Rathcormack br	2011/0401	16-Feb-11	-	0.021	14.8	0.039	136	97	11.5	10.1	0.02	7.2	< 1	6.8
Bride	Rathcormack br	2011/0627	02-Mar-11	-	0.016			160	102	11.8		0.014	7.4	0.4	6.6
Bride	Rathcormack br	2011/1460	11-May-11	-	0.021	13.3	0.044	144	101	10.7	8.74	0.022	7.6	1.2	13.1
Bride	Rathcormack br	2011/2448	04-Aug-11	-	0.018	18	0.017	182	97	9.6	12	0.028	7.6	1.1	15.4
Bride	Rathcormack br	2011/3075	08-Sep-11	-	0.017		0.011	184	106	10.7	8.89	0.013	7.7	0.4	14.5
Bride	Rathcormack br	2011/3745	19-Oct-11	-	0.03		< 0.006	159	98.4	11.5	9.2	< 0.013	7.5	1.6	8.4
Bride	Rathcormack br	2012/0677	28-Feb-12	-	0.021	15.6	0.063	169	102	11.4	11.8	0.015	7.6	0.6	10.7
Bride	Rathcormack br	2012/1312	25-Apr-12	-	0.009		0.017	146	100	10.9	8.62	0.028	7.6	1.3	9.8
Bride	Rathcormack br	2012/2024	21-Jun-12	-	0.05	13.2	0.052	148	96	10	8.74	0.041	7.4	1.5	11.4
Bride	Rathcormack br	2012/3481	10-Oct-12	-	0.025	16.1	0.044	187			10.3	0.019	7.8	0.5	

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18B050320 grid 181400/90700

Parameter	Molybdate Reactive Phosphorus	Ammonium	Conductivity @ 20 oC	Dissolved Oxygen % Saturation	Dissolved Oxygen	Nitrate	Nitrite	pH	BOD	Temperature	Suspended Solids	Total Nitrogen	Ammonium-N	NO3-N	Nitrite-N			
	P	NH4			O2	NO3	NO2		O2			N	NH4-N		NO2-N			
Max.	Varies	0.5	--	150	15	25	0.05	9	5	--	--	--	--	--	--			
Min.	--	--	--	50	5	--	--	6	--	--	--	--	--	--	--			
Entity	Station	Sample Re	Sample Date	Analyst Cor	mg/l	mg/l	µS/cm	% O2	mg/l	mg/l	mg/l	pH units	Degrees C	mg/l	mg/l	mg/l	mg/l	mg/l
Bride	Dr.Barry Br	2012/0143	18-Jan-12	-	0.024	0.015	171	99	11.3	10.9	0.025	7.5	< 1	9.7	1			
Bride	Dr.Barry Br	2012/0674	28-Feb-12	-	0.014	0.031	172	103	11.5	13.6	0.015	7.6	1.7	10.5	2	4		
Bride	Dr.Barry Br	2012/1309	25-Apr-12	-	0.009	0.018	146	102	11.1	7.3	0.028	7.6	1.4	9.4	7			
Bride	Dr.Barry Br	2012/1410	02-May-12	-	0.018	0.046	126	87	9.8		0.032	7.3	1.5	10.1	13			
Bride	Dr.Barry Br	2012/1823	06-Jun-12	-	0.017	0.033		107	11		0.02	7.7	1.5	12	3			
Bride	Dr.Barry Br	2012/2021	21-Jun-12	-	0.048	0.057	146	93	9.9		0.042	7.4	1.3	11.3	8			
Bride	Dr.Barry Br	2012/2260	05-Jul-12	-	0.041	0.068	159	93.9	9.7		0.036	7.5	0.9	13.4	2			
Bride	Dr.Barry Br	2012/2932	30-Aug-12	-	0.037	0.046	138	93	9.8		0.027	7.4	0.9	12.9	4			
Bride	Dr.Barry Br	2012/3012	05-Sep-12	-	0.021	0.007	170	97	10.3		0.013	7.7	0.5	13.6	< 1			
Bride	Dr.Barry Br	2012/3479	10-Oct-12	-	0.037	0.046	188			11.5	0.022	7.8	0.5		< 1			
Bride	Dr.Barry Br	2012/3788	07-Nov-12	-	0.025	0.024	178	98.6	11.4		0.024	7.8	< 1	9.2	1			
Bride	Dr.Barry Br	2013/0504	28-Feb-13	-	0.018		180	96	12		7.7	< 1	6.3	4		0.009		0.004
Bride	Dr.Barry Br	2013/0827	27-Mar-13	-	0.046		167	106	13.3		7.7	< 1	5.1			0.025		0.004
Bride	Dr.Barry Br	2013/1116	24-Apr-13	-	0.011		165	84	9.2		7.7	< 1	11.4			0.016		0.005
Bride	Dr.Barry Br	2013/1441	29-May-13	-	< 0.006		177	113	12.2		8.1	0.3	11.6	1		0.004		0.007
Bride	Dr.Barry Br	2013/1746	26-Jun-13	-	0.022	0.025	187	102	10.3	2.4	0.013	7.8	0.4	15.4	3			
Bride	Dr.Barry Br	2013/2618	28-Jun-13	-	< 0.006		199	103	10		8.1	1.1	17.1	1		< 0.005		0.003
Bride	Dr.Barry Br	2013/2151	17-Jul-13	-	0.028	0.014		104.1	9.8			1.2	18.6	4		0.011		0.009
Bride	Dr.Barry Br	2013/3021	25-Sep-13	-	0.026	0.516	146	80.7	8.1		7.8	< 1	14.6	1				0.03
Bride	Dr.Barry Br	2013/3333	23-Oct-13	-	0.042	0.023	137	92	9.7		7.4	0.2	11.7	5			1.7	0.009
Bride	Dr.Barry Br	2013/3732	27-Nov-13	-	0.026	0.059	169	105.8	12.8			0.6	7.7	2				0.007

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Appendix C – Revised Non-Technical Summary.

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SECTION A – NON-TECHNICAL SUMMARY

The village of Rathcormac is located 22Km North of Cork City, along the R639, formerly the N8. The village has experienced substantial construction and population growth in the last 10 years.

The Waste Water Works and the Activities Carried Out Theirin;

The wastewater in Rathcormac is collected in a partially combined foul and separate foul sewerage drainage network. The wastewater from both the centre and northern section of the village gravitates to the pumping station. From the pump station the sewerage is pumped through a 200mm diameter rising main to the manhole at the crossroads on Canon Street. The wastewater arising from the south-western parts of the village drains directly to the confluence of network at Canon Street. From the manhole at the crossroads on Canon Street the wastewater gravitates directly to the wastewater treatment plant.

A new WWTP was constructed at Rathcormac and commissioned in late 2009 to cater for a P.E. of 4,000 and BOD loading of 240 kg/day to ensure adequate treatment capacity and compliance with the urban wastewater regulations.

The main elements of the WWTP are;

1. Inlet Screening
2. Inlet Flume
3. 3 No. Sequential Batch Reactors
4. 2 No. Sand Filters
5. Picket Fence Thickener
6. Balance Holding Tank
7. Phosphorous Removal by Ferric Sulphate Dosing
8. Storm Water Holding Tank
9. 3 No. Automatic Samplers
10. Control Building

The daily normal effluent volume emitted from the Primary Discharge is approximately 150 m³/day to 200 m³/day.

Rathcormac WWTP is operated by Cork County Council. The WWTP is operated by a wastewater whose duties also include the operation of two other WWTP's in the area. The Caretaker is on duty from 08:30 to 17:00, Monday to Friday and also inspects the Rathcormac WWTP daily at weekends.

There are a number of alarm settings at the WWTP which notify the Caretaker of potentially serious plant malfunctions outside of these hours.

The Sources of Emissions From the Works;

The pollution load for the Rathcormac agglomeration arises from the following areas;

- Domestic Population
- Commercial Premises
- Industrial Premises
- School and Crèches
- Infiltration

The sewerage from all commercial premises is collected via the public sewer and treated in conjunction with the domestic waste at the WWTP. There are no known or licensed industrial waste streams discharging to the sewerage network.

The Nature and Quantities of Forseeable Emissions from the Waste Water Works into the Receiving Aqueous Environment as well as Identification of Significant Effects of the Emissions on the Environment.

The final treated effluent is discharged to the River Bride adjacent to the WWTP site. The WWTP is designed to cater for a P.E. of 4,000 which equates to a maximum treated effluent hydraulic load of some 900 m³/day. Volumes potentially discharged from the Storm Holding Tank on site at the WWTP are additional to this.

There is a single storm water holding tank on site with a capacity of 180 m³. Storm water is held in the on site storm holding tank until such time as capacity is again available within the treatment process and the flows held in the storm tank are then return pumped for treatment. Should the volume of the on-site storm holding tank be exceeded the excess is decanted via an overflow baffle and is discharged from the WWTP via the Primary Discharge.

During power blackouts the waste stream will back up at the inlet works and overflow to the Storm Holding Tank.

The Proposed Technology and Other Techniques for Preventing or, where this is not possible, Reducing Emissions from the Waste Water Works.

The WWTP has sufficient numbers of standby pumps, storm holding facilities, sludge holding facilities, etc. to ensure continuation of wastewater treatment and consists of the following elements;

1. Inlet Screening
2. Inlet Flume
3. 3 No. Sequential Batch Reactors
4. 2 No. Sand Filters
5. Picket Fence Thickener
6. Balance Holding Tank
7. Phosphorous Removal by Ferric Sulphate Dosing (2 No. Pumps)
8. Storm Water Holding Tank
9. 3 No. Automatic Samplers
10. Control Building

The Control System for the WWTP also includes a number of alarm settings for critical plant items which notify the Caretaker of potentially serious plant malfunctions outside of normal working hours.

Further Measures Planned to Comply with the General Principle of the Basic Obligations of the Operator, i.e. That no Significant Pollution is caused;

There are no planned works for the WWTP.

Measures Planned to Monitor Emissions into the Environment;

The Cork County Council Environmental Laboratory carries out sampling of the influent and effluent in accordance with the requirements of the Urban Wastewater Regulations. A composite sampler is located at the outlet (Primary Discharge) from the WWTP.

The EU Water Framework Directive Monitoring Programme is to be fully operational by the year 2012. This monitoring programme was prepared by the EPA to meet the requirements of the EU Water Framework Directive (2000/60/EC) and National Regulations implementing the Water Framework Directive (S.I. No. 722 of 2003) and National Regulations implementing the Nitrates Directive (S.I. No. 788 of 2005).