Clare County Council

Application for Wastewater Discharge Certificate for Nooan (Ruan)

Non-technical summary

In accordance with Article 5 of Waste Water Discharge (Authorisation) Regulations, S.I. 684 of 2007
Section A: Non-technical summary

1  Introduction
Clare County Council is submitting an application to the Environmental Protection Agency (EPA) for a certificate to discharge treated wastewater from the waste water treatment plant (WWTP) serving the Rural Housing Organisation (RRO) housing scheme at Nooan, Ruan, in accordance with Article 5.2 of the Wastewater Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007), as amended. The application form and its attachments are completed as required by the EPA in accordance with guidance notes provided.

2  Description of Ruan Village
Ruan is a small village located approximately 11 kilometers to the north of Ennis. The housing development, to which this application refers, is a Rural Housing Organisation (RRO) Housing Scheme, which was constructed in 1993 and is located immediately south-west of Ruan village within the townland of Nooan. The development has an estimated population equivalent (p.e.) of 58 based on an occupancy rate of 2.9 p.e./house. A map indicating the agglomeration served by the Ruan (Nooan) RRO housing scheme and the location of the wastewater treatment facility is provided as Attachment B.1.

3  Wastewater sources
Domestic wastewater is the only component of discharge to the Nooan (Ruan) sewer collection system, i.e. it is a foul collection system only. Permission was granted for a 20 house scheme in November 1993 under File Reference Number P8/6596. There are no commercial or industrial sector discharges to the plant or proposals to increase the population served by the WWTP.

4  Wastewater Flow volumes
The estimation of 58 p.e. for Nooan (Ruan) is based on the mean house occupancy for the 20 houses within the development. No flow data is currently available for the system however taking account of the design p.e. of 58, this equates to an average daily flow of 10.44m³ if based on an hydraulic load of 180 litres/head/day.

5  Treatment Process Description
The wastewater treatment unit serving the development comprises of a self contained unit consisting of primary settlement, biological aeration stage and final settlement with final discharge to a raised percolation bed. The location of the primary discharge point, P(GW1) (prior to the raised percolation bed is E132849; N186425;
6  **Sludge Management**
Intermittent desludging of the WWTP is undertaken as required.

7  **Combined storm overflows**
There are no combined storm overflows in the system. The sewer system is a foul only collection system, with no overflows.

8  **Impact of discharges on Receiving Waters**
Final discharge from the Nooan (Ruan) agglomeration is to a raised percolation bed and ultimately to the Ennis Ground Water Body Code: Sh_G_080. The overall impact on the Ennis Ground Water Body is estimated by reference to the existing status of the water body which is described as “Poor” status.

The receiving waters are considered under a number of headings:
- Description of receiving waters
- Statutory Designations of the Receiving Waters
- Monitoring undertaken on receiving waters
- Assimilative capacity of the receiving waters
- Total maximum nutrient load discharging to receiving waters
- Impact of storm overflows

8.1  **Description of receiving waters**
The Shannon River Basin Management Plan describes the Ennis Ground Water Body as karstic and lists it as “poor” status with the overall objective to “Restore to Good Status” by 2021. The status report is provided in **Attachment F.1.1** to this application. The WWTP site at Nooan (Ruan) is also situated within the Inner Protection Zone for Pouladower Spring, which is located approximately 5.5 km downstream to the north-west of Ballyallia lake. In 2000, a report was carried out by the Geological Institute of Ireland (GSI) to delineate the catchment area for the spring, with a view to using the spring as an additional water source for drinking water in Ennis. Pouladower spring is not used as a water supply source and the protection zone is not applicable, but is useful as a description of the complex water flows in the area. A copy of the draft report is provided in **Attachment F.1.2**.

8.2  **Statutory designations of the Receiving Waters.**
A number of protected sites are located in proximity to the WWTP site at Nooan (Ruan) and are described in Table 1 below. A map identifying the Natura sites within a 5 kilometer radius of the WWTP at Nooan (Ruan) is provided as **Attachment B.2.1**. The sites have been selected for conservation of numerous habitats including Limestone pavements, Alkaline and Calcareous fens, water courses and natural eutrophioic lakes, semi-natural grasslands,
numerous protected flora and fauna species. The site in closest proximity to the WWTP at Nooan (Ruan) is the Dromore Woods and Loughs SAC Site Code: 000032 situated to the east.

The Pouladower spring catchment area overlaps with the Dromore Woods and Loughs SAC. Other protected sites in the vicinity of the WWTP at Nooan (Ruan) include the East Burren Complex SAC to the north west of the site, Ballyogan Lough SAC and the Moyree River System SAC to the north-east, Ballycullinan Lough SAC to the west and Ballyallia Lough SAC, SPA and pNHA to the south. Only those sites within the 5 kilometer radius of the WWTP site at Nooan (Ruan) are listed in Table 1 below. Three other SAC sites located within the 5 km radius of the WWTP as designated as SAC with the feature of interest as the Lesser horseshoe bat.

Table 1 Listed of Protected Sites

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Protected Site</th>
<th>Code</th>
<th>Distance km</th>
<th>Location</th>
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<tr>
<td>Dromore Wood and Lough</td>
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<td>000032</td>
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<td>East Burren Complex</td>
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<td>Moyree River System</td>
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<td>Ballyallia Lake</td>
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<td>5.1</td>
<td>South</td>
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<tr>
<td></td>
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<td>&amp;004041</td>
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<tr>
<td>Ballycullinan Old Domestic Building</td>
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<tr>
<td>Toonagh Estate</td>
<td>SAC</td>
<td>002247</td>
<td>5.1</td>
<td>South</td>
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</table>

8.3  Monitoring undertaken on receiving waters

No monitoring of the receiving waters has been undertaken.

8.4  Assimilative capacity of receiving waters

The discharge from the WWTP at Nooan (Ruan) discharges to a raised percolation bed and ultimately to groundwater. Analytical data is not available to assess the assimilative capacity of the receiving waters however reference is made to the existing status of the water body, Ennis Ground Water Body Code: Sh_G_080, which is described as “Poor” status. The status report is provided as Attachment F.1.1 to this application. In addition due to the complex hydrogeological flow regime in the area, with ground and surface waters closely interlinked, the water quality of the River Fergus is assessed with a view to the assimilative capacity in
the receiving waters of the discharge. The most recent water quality status or Q rating (EPA data), for the River Fergus indicates the water quality at Nutfield Bridge, over 4 km downstream of Ruan is moderate i.e. Q 3-4.

8.5 **Total maximum nutrient load discharging to receiving waters**
Limited analytical data is available for assessment of the nutrient loading of the discharge on the receiving waters, however additional attenuation or treatment of the discharge is available within the raised percolation bed, which further minimises the impact from the discharge on the receiving waterbody.

Results of monitoring, as provided in Attachment E.4, indicates that the effluent discharge is not in compliance with the Urban Waste Water Treatment Regulations, 2001 - 2010. Corrective actions to ensure compliance with the Regulations are being implemented currently.

8.6 **Impact of storm overflows**
There are no pumping stations in the agglomeration.

9 **Proposed technology for improving emissions from WWTP**
There are no proposals in place for upgrading of the WWTP serving the Nooan (Ruan) agglomeration. However corrective actions in the form of assessing/improving process control of the treatment unit and more regular desludging of the plant are being implemented to ensure compliance with the Urban Waste Water Treatment Regulations, 2001 – 2010.

10 **Measures planned to monitor emissions into the environment**
Provisions for monitoring emissions from the WWTP at Nooan (Ruan) are in place. The discharge from the WWTP is to a percolation area and monitoring of the effluent emission is carried out biannually.
16th December 2009.

Ms. Yvonne Doris  
Environmental Protection Agency, 
Office of Environmental Enforcement, 
Headquarters, 
PO Box 3000, 
Johnstown Castle Estate, 
Co. Wexford.

Re: Discharge to Kilfenora Turlough – PAE2009/189

Dear Ms. Doris,

In relation to the above complaint which was received in our office on the 05th October 2009, I wish to reply as follows:-

This complaint refers to three locations of Clare County Council discharges.

- **Turlough Kilfenora**
  The discharge is currently directly to a swallowhole (groundwater, not a turlough). This discharge is the subject of a scheme upgrade funded under the Water Services Investment Programme (WSIP) which deals with the discharge. Clare County Council is currently waiting approval of a Preliminary Report from the Department of Environment, Heritage and Local Government (DEHLG) subject to normal clarifications/reporting. The Environmental Laboratory Staff of Clare County Council are dealing with the licencing requirements under the EPA Licence.

- **River Fergus (Corofin)**
  A new Waste Water Treatment Plant is currently under construction in Corofin and will be commissioned in February 2010. The discharge will meet all EU and National requirements and is subject of an EPA discharge licence (currently being processed).
• **Toormore Ruan Waste Water Treatment Plant**

There is no waste water treatment plant for the village of Ruan but there are two small packaged treatment plants in place – one is for the Council housing estate at which provides wastewater treatment for 32 houses at Toormore Ruan. The plant is a KEE 0975 NuDisc. Clare County Council currently have a service contract with Enviro Services Limited for the maintenance of this plant.

In September 2009 the plant malfunctioned and it transpired that the gearbox of the plant required repair. Significant work was carried out on the plant since September and it is operating satisfactorily.

The other plant is taken care of by the Water Services Section of Clare County Council for North Clare. This plant serves the Rural Housing Organisation (RHO) houses in Ruan. The plant was designed and installed by Mahon and McPhillips and is typical of the plants which were used for these housing estates at the time. It is a Rotating Biological Contractor and contains three distinct stages of treatment primary, secondary and a final settlement tank. The treated effluent is then discharged to a percolation area.

Your sincerely,

[Signature]

Betty Devanny
Environmental Complaints Co-ordinator,
Environment & Water Services Directorate.

CC – Mr. Michael Duffy, 1 Clás Na hEaglaise, Kilfenora, Co. Clare.
Mr. Steve Lahiffe, A/Senior Executive Engineer, Ennistymon Area Office
Ms. Siobhan McNulty, A/Senior Executive Engineer, Housing Section.
Ms. Betty Devaney  
Environmental Complaints Co-Ordinator,  
Clare County Council,  
Áras Contae an Chlár,  
New Road,  
Ennis,  
Co. Clare  

A Chara,

Thank you for letter of 7th October 2009. I would like to point out that the letter to which you refer originated from the enforcement section of the EPA, and not from me. Please note that along with the discharge of effluent at the Kilfenora Tarlough, my complaint to the EPA included discharge of effluent by Clare County Council (CCC) at Corofin, to the river Fergus, and at Ruan to groundwater. If you wish, I have no objection to the EPA supplying a copy of the C3 complaint to you. For the record, I made a formal complaint to CCC on 19th May 2009 regarding the Kilfenora discharge and another on the 16th July 2009 regarding the other two discharges. All three discharges are on-going, and CCC has no discharge licence of certificate for any of these.

Yours Sincerely,

Michael Duffy.

cc. Yvonne Doris EPA.
07th October 2009.

Mr. Michael Duffy
1 Clós Na hEaglaise,
Kilfenora,
Co. Clare.

Re: Discharge to Kilfenora Turlough – PAE2009/189

Dear Mr. Duffy,

I acknowledge receipt of your letter dated 01st October 2009 regarding the above.

I am having this matter investigated and will revert back to you as soon as possible.

Yours sincerely,

Betty Devanny
Environmental Complaints Co-ordinator,
Environment & Water Services Directorate.
Mrs Betty Devaney  
Environmental Complaints Coordinator  
Clare County Council  
Environment and Emergency Services  
Directorate  
Block B, IAPE Building  
Gort Road, Ennis  
Co. Clare  

01/10/2009  

Re: Discharge to Kilfenora Turlough – PAE2009/189.  

Dear Mrs Devaney  

The Agency has received a complaint concerning the above referenced matter. A copy of same is enclosed for your attention and action.  

It is advisable that Clare County Council takes all steps to investigate and resolve this issue, utilising all appropriate enforcement action as necessary. Your Council is also requested to directly contact the complainant in relation to this matter and to advise the complainant that Clare County Council is investigating and dealing with the complaint.  

The referral of this complaint to Clare County Council closes our file on this issue. This is now a matter for your Council to follow up and investigate as appropriate.  

The EPA person dealing with this file is Yvonne Doris to whom all correspondence and queries in relation to the matter should be addressed.  

Please use the reference number above in all future communications with the OEE regarding this matter.  

Yours sincerely,  

Yvonne Doris  
Office of Environmental Enforcement  

cc: Mr Michael Duffy, Kilfenora, Co. Clare
COMPLAINT FORM C3
Page 1 of 3

CONCERNING LOCAL AUTHORITY ENVIRONMENTAL PROTECTION RESPONSIBILITIES

If you have a query or complaint about general environmental pollution matters or about facilities under the control of local authorities, you should always contact the relevant local authority in the first instance, preferably in writing. Always keep a copy of any correspondence between yourself and a local authority and details of phone calls. If a local authority has failed to respond to your complaint and the environmental pollution problem persists, please fill out this form and submit the relevant details, including copies of your correspondence to your local authority, to:

Environmental Complaints Unit
Office of Environmental Enforcement
Environmental Protection Agency
P.O. Box 3000
Johnstown Castle Estate
Co. Wexford

Email: info@epa.ie

The OEE will, generally, only investigate complaints relating to local authority functions where there is clear evidence that the local authority has been made aware of the complaint and been given an opportunity to deal with and resolve the issue. It is therefore important that you provide the OEE with details of your contacts with the relevant local authorities. You should note that information submitted may be forwarded to the relevant Local Authorities for the purposes of investigation. Information submitted to the OEE is also subject to the provisions of the Freedom of Information Act 1997.

Having completed this form, please also send copies of any correspondence or other supporting information such as photographs and maps to the above address.

Please complete this form in BLOCK LETTERS.

1. Your Name: Michael Duffy
2. Address: 1 Clòs Na hEaglaise, Kilfenora, Co. Clare.
3. Telephone Number: 065 7088088 ; 086 2557258
4. Fax: N/A
5. E-mail address: duffycivileng@gmail.com

6. The name of the relevant Local Authority: Clare Co. Co.

7. Name and Address of the industry, site, facility or individual to which the complaint relates. Please provide description of the location including identifying landmarks and directions from nearest town/village if available. Please continue on a separate sheet if necessary:

Effluent discharge to Turlough at Kilfenora; ING 117481,193567
Effluent discharge to river Fergus at Corofin
Effluent discharge to river Fergus at Ruan.

8. Fullest possible account of facts giving rise to the complaint (INCLUDING TIME, DATE AND DURATION OF OCCURRENCE). The description should be as specific as possible and concentrate on the facts surrounding the issue being complained about. If you have photographs please include copies with this form:

CCC is discharging on average, 237m$^3$/day of WWT effluent to groundwater via a karst conduit in Kilfenora. There are no assimilative capacity calculations for this discharge. This is an illegal discharge for which CCC has no certificate. Flow velocity at this discharge point has been recorded at between 60-300 m/hr. This in theory could allow this effluent to be at the Ennis potable source in 3 – 15 days.

As CCC has no records of the volumes of discharges from either Corofin or Ruan, I will make an educated guess. I suggest 600m$^3$/day from Corofin and 200m$^3$/day from Ruan. Thus CCC is allowing approximately 1000m$^3$/day of poorly treated effluent into the potable water catchment for Ennis and environs. Can I respectfully suggest this is part of the problem with the on-going problem with potable water for Ennis town, which is sourced from this catchment.

9. Details of the approaches already made (by telephone or in writing) to the local authority (attach copies of correspondence). Please include the local authority contact name if available:

As Attached
COMPLAINT FORM C3

Page 3 of 3

10. Have you reported your complaint to the Illegal Dumping Line (1850 365 121)? **N/A**

11. Have you contacted the OEE previously in relation to this complaint? If Yes, provide details of most recent contact.
   
   **No.**

12. Details of any approaches that you already made to other authorities (e.g. Department of the Environment, Heritage and Local Government, Fisheries Board, European Commission). Please include copies of your correspondence with this form:
   
   **None**

13. Details of any court or other legal actions that you have already taken in relation to the issue being complained about.
   
   **None.**

14. Confidentiality

   Please tick √ beside the statement below if you wish to EPA **not** to disclose your identity in its investigation of this matter.

   I request the EPA **not** to disclose my identity in its investigation of this matter. **No preference**

15. Date and Signature of complainant:

   **DATE:** 25th September 2009

   **SIGNATURE:** [Signature]
I Clós Na hÉaglaise,
Kilfenora,
Co. Clare.

10/07/09

Mr. Tom Coughlin,
County Manager
Clare County Council,
Áras Contae an Chláir,
New Road,
Ennis,
Co. Clare

A Chara,

Thank you for your reply of 29th May 2009. I have since also had replies from Mr. Gerard Dollard, Director of Services, Community & Enterprise, and from Mr. Seán Ward, Senior Engineer, Water Services, both of which I am grateful for.

I find Mr. Dollard’s reply disingenuous. I did not seek a spin on the quality of other bathing waters in County Clare, which by implication, may retain their “Good” status by virtue of the sampling locations chosen. The lack of designation is not a mitigating factor for pollution. My particular interest in Ballyalla Lake stems from the fact that it incorporates the Pouladower Spring and is in close proximity to the Drumcliff Spring. While it is believed that these springs are independent, it is by no means conclusive. In particular it is quite possible, if not probable that these sources are connected to the North West, outside Corofin. As you know, the Drumcliff Spring is the source of potable water for Ennis and environs. Two reports, presented in February 2000 by Jenny Deakin, Geological Survey of Ireland et al, go into some detail in relation to source protection for both of these springs. In light of the experience with water quality in Ennis since these reports were published, I believe that there is a much more significant connection.

I accept that the problem with bathing water quality in Ballyalla Lake is partly due to the “numerous small farms” and the “scattered rural domestic housing and tourist accommodation”, mentioned as “potential pollution sources” in these reports. However, more importantly, and not mentioned in these reports, is the unquantifiable volume of effluent from three WWTP’s which Clare County Council are
contributing to this water system. I say more importantly, because as the regulatory body for environmental pollution in the first instance, CCC’s actions in this regard are possibly criminal, in that, it has the knowledge and expertise to be aware of the consequences of its actions. The individuals in the “numerous small farms” and the “scattered rural domestic housing and tourist accommodation” may not be as enlightened. Incidentally, I’m sure there is no need to remind you that these people, through their rates, water charges, planning contributions etc. help fund the Council. A cynic could be forgiven for suggesting that CCC, and in particular, Mr. Dollard, would have been better employed in concentrating on arranging both funding and engineering solutions to these effluent discharges, rather than visiting the USA with the begging bowl to fund the perceived honey pot of the Cliff’s of Moher.

Waste water treatment is arguably as important an infrastructural issue as roads. It is infinitely more important than constructing aesthetically pleasing walls at the side of road realignment works, which CCC have lavishly embraced in recent years.

CCC is discharging on average, 237 m³/day of WWT effluent to groundwater via a karst conduit in Kilfenora. There are no assimilative capacity calculations for this discharge. This is an illegal discharge for which CCC has no certificate. Flow velocity at this discharge point has been recorded at between 60-300 m/hr. This in theory could allow this effluent to be at the Ennis source in 3 – 15 days.

“Water quality at Pouladower is generally relatively good with low levels of chemical contaminant indicators such as chloride, nitrate and potassium. The bacteriological analyses however, often show the presence of faecal coliforms (E. coli), although this is typical in a karst spring where groundwater travel times are often much less than 100 days.”

“Bacteria and most viruses will not live longer than 100 days in groundwater. Deakin 2000.

“Water quality at Drumcliff fluctuates throughout the year with the poorer quality analyses being returned during the winter months and during periods of heavy rainfall. Colour, turbidity and iron have all exceeded the EC Drinking Water Directive maximum admissible concentrations (MAC) on occasion almost every year. Total coliforms and E. coli are also often present”. Deakin 2000.

As CCC has no records of the volumes of discharges from either Corofin or Ruan, I will make an educated guess. I suggest 600 m³/day from Corofin and 200 m³/day from Ruan. Thus CCC is allowing approximately 1000 m³/day of poorly treated effluent into the potable water catchment for Ennis and environs. Can I respectfully suggest this would be a good starting point for determining why Ballyalla Lake is not attaining bathing water standards?

The average on-site treatment system produces 1 m³/day of effluent. While a significant % of these in this area may not be treating waste water correctly, the vast majority will have some degree of soil retention of the effluent before it enters surface/groundwater. It is quite reasonable to suggest that CCC is the dominant polluter of these waters. The fact that it is tasked with planning regulation and enforcement of on-site treatment systems, and now farm inspections, is an abomination, considering its roll as a polluter.
You will no doubt cite a lack of capital for resolving these issues in the past. We all know how infinitely more difficult this is going to be in the future. I am not suggesting that you alone or your predecessors are solely responsible for this situation, but the buck locally, stops on your desk.

I have a major issue with CCC’s policy in relation to on-site waste water treatment systems (WWTS’s). An EPA manual on this issue has been available for guidance since 2000. CCC started a policy of site suitability assessment in 2004. It regularly (if not always) conditions supervision of the installation of these systems. CCC planning dept. has no idea of how many of these planning permissions are in compliance. This was a perfect opportunity to draw a line in the sand and ensure that any system installed after commencement of this policy was correct. The ridiculous situation about this is that onerous planning conditions have stipulated expensive systems and processes, which in a large % of cases have been incorrectly installed because the supervision is a joke, if it is actually carried out at all. This is a major flaw in its policy. It is one thing telling a home owner, who installed a septic tank and sump, 25 years ago for £500, that they will have to stop polluting groundwater by now installing a system. Would you like to be telling the homeowner, who installed a €10,000 system two years ago, that they have to replace their polishing filter? You may say that CCC is covered legally (which has yet to be tested), but it certainly is not covered morally. If CCC (an all LA’s) thinks that creating the roll of “Site Suitability Assessor”, with indemnity insurance, solves this problem, they are mistaken. If LA’s see the need to distance themselves from this liability, then they should remove themselves from the process. I argue that if a professional engineer assesses, designs, supervises and certifies an installation to EPA standards, then LA’s need not be involved. This would be similar to other aspects of construction e.g. foundation design, roof design etc. It should be a condition of all planning permissions that a professional should have to certify compliance within the duration of the permission. This should be proper compliance and supervision. The professional must commit to supervise the construction from the start, and inspect all aspects of works before they are covered up. The professional bodies have an urgent job to do to explain to their members that certification & supervision mean what they say.

I have an instance where I, as a professional engineer, supervised and certified all aspects of the installation of a polishing filter, yet CCC informed my client that he was not in compliance because I was not a “member of the panel”. I know of numerous cases were “panel members” have certified work which is incorrect and also designed systems (later conditioned in permission by CCC) which are incorrect. Can you explain how CCC can condition supervision by a “panel member” yet it does not condition prohibiting under-sink macerators (ref. S.Ward). Forming another level of “consultant” as in the “waste water panel” is a ridiculous waste of resources. LA’s should be striding to consolidate the planning/building process instead of diversifying it. Consolidation is the only way that the sentiments expressed by Sean Ward (“Need for local stakeholders to be on board with local measures”) in his presentation to Engineers Ireland Conference April 2009, can be achieved. I have no problem competing with any amount of other Engineers or Architects for work, but I shouldn’t have to compete with a part-time farmer who sat a 7 day FAS course. Neither should I have to employ this part-time farmer to supervise my work in order to satisfy a condition of planning.
Through my interest in on-site treatment systems and site assessment, I am aware that Kilfenora and an extensive area to the South East are in the Outer Area for Source Protection of the Ennis Source (I agree with this designation). As you probably know, this designation demands more onerous conditions in relation to on-site WWTS. It seems grossly unfair that CCC should condition these elevated standards, yet at the same time feels free to discharge effluent to surface and groundwater within this zone.

I am grateful to Mr. Sean Ward for his description of the DBO process and the basic requirements of CCC for the water treatment plant. It is only logical to assume that the poorer the quality of the raw water, the higher the tender price of the DBO. CCC have, through their own doing, created a situation where they were forced to undertake this DBO at a time when the raw water is at its worst. If the WFD is to be implemented, the quality of raw water will only improve in the future. If CCC addressed the effluent discharges which I refer to, at an earlier stage, then this DBO might have been significantly less costly.

I have already made a formal complaint about the discharge to groundwater from Kilfenora WWTP. I wish to now make a formal complaint about the discharge of effluent to surface waters at Corofin, without a discharge licence, and the discharge of effluent to groundwater at Ruan without a discharge certificate.

Yours Sincerely,

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Michael Duffy.

c.c.

Mr. Gerard Dollard CCC
Mr. David Timlin CCC
Mr. Seán Ward CCC
Dr. Michael Lehane EPA
Mr. Dara Lynott EPA
Minister for Environment, Heritage & Local Government.
Our Ref: AIE/02/2009/FMcN/KL

29th June, 2009.

Mr. Michael Duffy,
1 Clós na hEaglaise,
Kilfenora,
CO. CLARE.


Dear Mr. Duffy,

I refer to your request under the Access to Information on the Environment Regulations 2007 for details relating to the Corofin and Ruan Wastewater Treatment Plants (WWTP).

A decision was made on your request by me on 29th June, 2009. I may be contacted by telephone on 065-6845387 and will seek to answer any questions you may have and to assist you generally in this matter.

In response to your request, I have decided to grant your request as follows:

1) Results of Corofin and Ruan WWTP for 2008 are enclosed.

2) Daily Flow from the above – we do not have flow recorders in place.

3) The discharge for Corofin is to the River Fergus. The discharge for Ruan is to groundwater.

You may appeal this decision by writing to Mr. Michael McNamara, SEO, Corporate Services, Clare County Council, New Road, Ennis, Co. Clare and requesting an internal review of your application. You must make your appeal within 1 month of receiving this letter. The appeal process will involve a complete reconsideration of the matter by a senior member of the staff of this Council.

Yours sincerely,

Betty Devanny,
Administrative Officer,
Environment & Emergency Services Directorate.

Enc.

Clare County Council is an equal opportunities employer and welcomes applications from all sections of the community.

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Environment Department,
Clare County Council,
Aras Contae an Chlár,
New Road,
Ennis,
Co. Clare

1 Clòs na hEaglaise,
Kilfenora,
Co. Clare.
15/06/09

Your Ref: AIE/02/2009/FMcN/KL

A Chara,

Further to your reply of 11/06/09 to clarification requested regarding the above, can you indicate how the Assimilative Capacity Calculations were carried out for this discharge location? While I fully accept the flow velocity quoted, what Q value is being attributed to this conduit? Can you indicate the Allowable Discharge Concentration in mg/l for this discharge point? Please define the boundaries of the Source Protection Area for the Drumcliff Spring and on what basis is this delineation defined.

Regards,

Michael Duffy.
Our Ref: AIE/02/2009/FMcN/KL

11th June, 2009.

Mr. Michael Duffy,
1 Clós na hEaglaise,
Kilfenora,
CO. CLARE.

RE: AIE Request – Kilfenora Waste Water Treatment Plant

Dear Mr. Duffy,

I refer to your letter of 15th May regarding the above and wish to respond as follows:

- The units used in item No. 3 are meters per hour (flow rate).

- In relation to item No. 4 re. the groundwater map for the Pouladower/Drumcliff borehole, there is a groundwater source protection plan in place for the Drumcliff spring (source for Ennis public water supply). This plan is used when planning developments in the catchment are assessed. Even though a source protection plan was prepared for the Pouladower Spring as it was being considered as a possible source for Ennis public water supply, this no longer applies so we are not required to take the source protection plan into consideration when planning applications come in. The GSI are also aware of this.

Yours sincerely,

Betty Devanny,
Administrative Officer,
Environment & Emergency Services Directorate.
22nd May, 2009.

Mr. Michael Duffy,
1 Clóis Na hEaglaise,
Kilfenora,
CO. CLARE.

Dear Mr. Duffy,

I refer to your letter of 19th May, 2009 regarding the Kilfenora Waste Water Treatment Plant. I note that information was provided to you under the Access to Information on the Environment Regulations on 14th May, 2009.

This plant is operated by Clare County Council and comes within the remit of the Water Services Directorate. The Environment Department is, of course, involved in terms of the overall environmental monitoring at the location. I have forwarded a copy of your letter to Mr. David Timlin, Director of Services in the Water Services Department, who I am sure will be in contact with you directly.

Yours sincerely,

Gerard Dollard,
Director of Services,
Environment & Emergency Services Directorate.

c.c. Mr. D. Timlin, Director of Services.
I Clös Na hEaglaise,
Kilfenora,
Co. Clare.
19/05/09

Mr. Ger Dollard,
Director of Service,
Environment and Emergency Services Directorate.

Dear Mr. Dollard,

I would like to make a formal complaint regarding the discharge of a significant volume of effluent from the Waste Water Treatment Plant (WWTP) at Kilfenora on a continuous basis. This effluent is being discharged directly to groundwater without a pollution licence.

Yours Sincerely,

Michael Duffy.
I Clós na hÉaglaise,
Kilfenora,
Co. Clare.

15/05/09

Environment Department,
Clare County Council,
Áras Contae an Chlár,
New Road,
Ennis,
Co. Clare

Your Ref: AIE/02/2009/FMeN/KL

A Chara,

Thank you for your reply to my request for information relating to Kilfenora Waster Water Treatment Plant (WWTP). It would appear that the units quoted are a flow velocity rather than a flow rate. Could you clarify the units used at Item No.3? In relation to Item No. 4, the Geological Survey of Ireland (GSI) defines a Source Protection Area on its Groundwater Map for the Pouladower/Drumliff borehole. The outer area (SO) of this protection area extends to Kilfenora village. The GSI state that Source Protection Area’s are compiled in collaboration with Local Authorities. If this area, as defined, is incorrect, then significant additional requirements are being placed on individuals planning on-site WWT systems, due to the higher protection response required in a Source Protection Area. Could you clarify this anomaly?

Regards,

Michael Duffy.
14th May, 2009.

Mr. Michael Duffy,
1 Clós na hEaglaise,
Kilfenora,
CO. CLARE.


Dear Mr. Duffy,

I refer to your request under the Access to Information on the Environment Regulations 2007 for details relating to Kilfenora Wastewater Treatment Plant (WWTP).

A decision was made on your request by me on 14th May, 2009. I may be contacted by telephone on 065-6846387 and will seek to answer any questions you may have and to assist you generally in this matter.

In response to your request, I have decided to grant your request as follows:

1) The monthly results of analysis of the Kilfenora WWTP for 2008 is enclosed.
2) The average daily flow for 2008 was 237 m3/day.
3) At low water levels, the flow rate from the Ballybreen swallowhole is 60-125 m3/h, at high flow rates the flow is 150-300 m3/h.
4) There is no source protection zone active in the Kilfenora area.

You may appeal this decision by writing to Mr. Michael McNamara, CEO, Corporate Services, Clare County Council, New Road, Ennis, Co. Clare and requesting an internal review of your application. You must make your appeal within 1 month of receiving this letter. The appeal process will involve a complete reconsideration of the matter by a senior member of the staff of this Council.

Yours sincerely,

Betty Devanny,
Administrative Officer,
Environment & Emergency Services Directorate.

Clare County Council is an equal opportunities employer and welcomes applications from all sections of the Community.

EPA Export 23-10-2013:23:15:59
1 Clòs na hEaglaise,
Kilfenora,
Co. Clare.
15/04/09

Environment Department,
Clare County Council,
Áras Contae an Chláir,
New Road,
Ennis,
Co. Clare

A Chara,

Under AIE regulations 2007 (Directive 2003/47/EC / S.I.133 of 2007) I request the following information:

1. Results for the past 12 months of the quality of effluent from the Kilfenora waste water treatment works, which is being discharged to groundwater.
2. An estimate of the daily flow being discharged to groundwater.
3. Dilution figures for the design of this discharge.
4. Policy or terms of reference for the Council's input into the delineation of the outer source protection zone in the Kilfenora area.

I will accept the relevant information in any form.

regards,

Michael Duffy.
Significant Correspondence
Correspondence in relation to treatment of wastewaters in Ruan village was received by Clare County Council on October 1st 2009 – Ref: PAE2009/189. The correspondence arose in response to a complaint sent to the EPA regarding:

1. Effluent discharge to Turlough at Kilfenora.
2. Effluent discharge to River Fergus at Corofin.
3. Effluent discharge to River Fergus at Ruan.

The complainant had been in correspondence with the Council via the Access to Environmental Regulations, 2007 (AIE Regulations) since the previous April 2009. The initial contact related to the discharge of effluent from Kilfenora WWTP but following the initial response from the Council, the complainant also included references to effluent discharges to the River Fergus from both Corofin and Ruan.

Clare County Council responded to the EPA correspondence on December 16th 2009 and a copy of the response was forwarded to the complainant. The response advised that there is no wastewater treatment plant in place to serve Ruan village, rather there are two package plants in place serving two small housing estates. Wastewater treatment is provided at:

1. WWTP to serve Council housing estate which provides wastewater treatment for 32 houses at Toormore, Ruan, and which is the subject of this application.
2. WWTP operated by Clare County Council to serve Rural Housing Organisation (RRO) housing estate which provides wastewater treatment for 20 houses.

The emissions from both WWTPs discharge to percolation areas rather than directly to surface waters.

A summary of the correspondence is provided in Table 1 below and copies of the correspondence is provided as Attachment B.10.1.

<table>
<thead>
<tr>
<th>Date</th>
<th>Correspondence</th>
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<tr>
<td>15/04/2009</td>
<td>Request for information pursuant to Access to Information on the Environmental (AIE) Regulations, 2007 re Kilfenora WWTP</td>
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<tr>
<td>14/05/2009</td>
<td>Response issued by Clare Co. Co. Ref: AIE/02/2009/FMcN/KL</td>
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<tr>
<td>15/05/2009</td>
<td>Request for clarification to Response Ref: AIE/02/2009/FMcN/KL</td>
</tr>
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<td>19/05/2009</td>
<td>Letter of formal complaint to Ger Dollard DOS, re the discharge of effluent from Kilfenora WWTP.</td>
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<td>22/05/2009</td>
<td>Response issued by Clare Co. Co. re letter of 19/05/2009</td>
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<td>11/06/2009</td>
<td>Response issued by Clare Co. Co. re Ref: AIE/02/2009/FMcN/KL dated 15/05/2009</td>
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<td>Request for clarification to Response dated 11/06/2009 Ref: AIE/02/2009/FMcN/KL</td>
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<td>29/06/2009</td>
<td>Response issued by Clare Co. Co. re Ref: AIE/02/2009/FMcN/KL dated 15/06/2009</td>
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<td>10/07/2009</td>
<td>Letter of formal complaint to Co. Manager Clare Co. Co. re the discharge of effluent to groundwater and surfacewater from Kilfenora, Corofin and Ruan WWTPs. Letter copied to: Michael Lehane; Dara Lynott – EPA; Gerard Dollard DOS; David Timlin DOS; Sean Ward Senior Engineer – Clare Co. Co.; Minister of Environment, Heritage and Local Government</td>
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<td>01/10/2009</td>
<td>PAE2009/189 re Complaint to EPA dated 25/09/2009 re Discharge to Kilfenora Turlough – reference also made to treatment of wastewaters in Ruan.</td>
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<td>07/10/2009</td>
<td>Letter to complainant acknowledging receipt of complaint sent to the EPA Ref: PAE2009/189</td>
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<td>09/10/2009</td>
<td>Letter from complainant re PAE2009/189</td>
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<td>16/12/2009</td>
<td>Response issued by Clare Co. Co. re PAE2009/189</td>
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Description of Rural Resource Organisation WWTP at Nooan (Ruan)
Waste Sources
Domestic wastewater is the only component of discharge to the wastewater treatment plant (WWTP) in Nooan (Ruan). The housing development was constructed in 1993 with a secondary treatment unit installed as end of pipe treatment. There are no commercial or industrial sector discharges to the plant or proposals to increase the population served by the WWTP. There are no pumping stations in the agglomeration and no storm overflows.

The flow diagram for the WWTP is provided as Attachment C.1.1. A map indicating the agglomeration served by the WWTP at Nooan (Ruan) and the location of the wastewater treatment facility is provided as Attachment B.1 Map of the agglomeration serving the RRO WWTP Site at Nooan (Ruan) and Discharge Point.

Wastewater Flow volumes
No flow data is available for the WWTP however the WWTP was designed to serve a population equivalent (PE) of 58, which equates to an average daily flow of 10.44m³ if based on an hydraulic load of 180 litres/Head/day.

Treatment Process Description
The wastewater treatment unit serving the development comprises of a self contained unit consisting of:
- Primary settlement
- Biological aeration stage
- Final settlement
- Final discharge is to a raised percolation bed.

The location of the discharge point, P(GW1) (prior to the raised percolation bed is E132849; N186425;

Sludge Management
Sludge is removed off-site as required.

Combined storm overflows
The sewer system is a foul only collection system, with no storm overflow facility in place.
Flow Diagram for Waste Water Treatment Plant at Nooan (Ruan)

Inlet wastewater flow

Wastewater Treatment Unit

Effluent Discharge Monitoring Point GW1

Raised Percolation Bed