



# Comhairle Chontae NA MÍ Meath County Council

## BOHERMEEN SEWERAGE SCHEME

### WASTE WATER CERTIFICATE OF AUTHORISATION APPLICATION

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**FINAL**

**December 2009**

**Director of Services,  
Infrastructure,  
Meath County Council,  
County Hall,  
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## **DOCUMENT APPROVAL**

<b>PROJECT</b>	Bohermeen Sewerage Scheme – EPA Waste Water Discharge Certificate of Authorisation Application	
<b>CLIENT / JOB NO</b>	Meath County Council	4654
<b>DOCUMENT TITLE</b>	EPA Waste Water Discharge Certificate of Authorisation Application	

**Prepared by**

**Reviewed by**

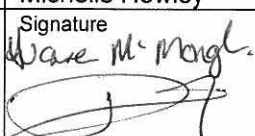


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**BOHERMEEN SEWERAGE SCHEME**  
**WASTE WATER DISCHARGE CERTIFICATE OF**  
**AUTHORISATION APPLICATION**

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This is a draft document and is subject to revision.



# Waste Water Discharge Certificate of Authorisation Application Form

EPA Ref. N<sup>o</sup>:  
(Office use only)

**Environmental Protection Agency**  
PO Box 3000, Johnstown Castle Estate, Co. Wexford  
Lo Call: 1890 335599 Telephone: 053-9160600 Fax: 053-9160699  
Web: [www.epa.ie](http://www.epa.ie) Email: [info@epa.ie](mailto:info@epa.ie)



### Tracking Amendments to Draft Application Form

Version No.	Date	Amendment since previous version	Reason
V. 1.	12/06/2009	N/A	
V.2.	17/06/2009	<p>Delete reference to Design Build and Operate</p> <p>Delete the requirement to provide contact information for the associated waste water treatment plant</p> <p>Replace references to the Water Services investment Programme with the Small Schemes Programme</p> <p>Update references to new legislation</p> <p>Inclusion of the requirement to submit information on private WWTPs within the agglomeration.</p>	<p>To accurately reflect the information required for the small schemes programme</p> <p>To accurately reflect the information required and the scale of the waste water works</p> <p>To accurately reflect the information required for the small schemes programme</p> <p>To reflect changes in legislation</p> <p>To obtain an overview of all discharges within the agglomeration.</p>

**Environmental Protection Agency**  
Application for a Waste Water Discharge Certificate of Authorisation  
Waste Water Discharge (Authorisation) Regulations, 2007.

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## ABOUT THIS APPLICATION FORM

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This form is for the purpose of making an application for a Waste Water Discharge Certificate of Authorisation under the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007) or for the review of an existing Waste Water Discharge Certificate of Authorisation.

The Application Form **must** be completed in accordance with the instructions and guidance provided in the *Waste Water Discharge Certificate of Authorisation Application Guidance Note*. The Guidance Note gives an overview of Waste Water Certificates of Authorisation, outlines the certification application process (including the number of copies required) and specifies the information to be submitted as part of the application. The Guidance Note and application form are available to download from the licensing page of the EPA's website at [www.epa.ie](http://www.epa.ie).

A valid application for a Waste Water Discharge Certificate of Authorisation must contain the information prescribed in the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007). Regulation 24 of the Regulations sets out the statutory requirements for information to accompany a Certificate of Authorisation application. The application form is designed in such a way as to set out these questions in a structured manner and not necessarily in the order presented in the Regulations. In order to ensure a legally valid application with respect to Regulation 24 requirements, please complete the Regulation 24 Checklist provided in the following web based tool:  
[http://78.137.160.73/epa\\_wwd\\_licensing/](http://78.137.160.73/epa_wwd_licensing/).

This Application Form does not purport to be and should not be considered a legal interpretation of the provisions and requirements of the Waste Water Discharge (Authorisation) Regulations, 2007. **While every effort has been made to ensure the accuracy of the material contained in the Application Form, the EPA assumes no responsibility and gives no guarantee, or warranty concerning the accuracy, completeness or up-to-date nature of the information provided herein and does not accept any liability whatsoever arising from any errors or omissions.**

Should there be any contradiction between the information requirements set out in the Application Form and any clarifying explanation contained in the accompanying Guidance Note, then the requirements in this Application Form shall take precedence.



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## PROCEDURES

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The procedure for making and processing of applications for waste water discharge Certificates of Authorisation, and for the processing of reviews of such Certificates, appears in the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007) and is summarised below. The application fees that shall accompany an application are listed in the Third Schedule to the Regulations.

An application for a Certificate of Authorisation must be submitted on the appropriate form (available from the Agency website – <http://www.epa.ie/whatwedo/licensing/wwda/>) with the correct fee, and should contain relevant supporting documentation as attachments. The application should be based on responses to the form and include supporting written text and the appropriate use of tables and drawings. Where point source emissions occur, a system of unique reference numbers should be used to denote each discharge point. These should be simple, logical, and traceable throughout the application.

The application form is divided into a number of sections of related information. The purpose of these divisions is to facilitate both the applicant and the Agency in the provision of the information and its assessment. **Please adhere to the format as set out in the application form and clearly number each section and associated attachment, if applicable, accordingly.** Attachments should be clearly numbered, titled and paginated and must contain the required information as set out in the application form. Additional attachments may be included to supply any further information supporting the application. Any references made should be supported by a bibliography.

**All questions should be answered. Where information is requested in the application form, which is not relevant to the particular application, the words "not applicable" should be clearly written on the form. The abbreviation "N/A" should not be used.**

Additional information may need to be submitted beyond that which is explicitly requested on this form. Any references made should be supported by a bibliography. The Agency may request further information (under notices provided for in the Regulations) if it considers that its provision is material to the assessment of the application. Advice should be sought from the Agency where there is doubt about the type of information required or the level of detail.

Information supplied in this application, including supporting documentation will be put on public display and be open to inspection by any person.

Applicants should be aware that a contravention of the conditions of a waste water discharge Certificate of Authorisation is an offence under the Waste Water Discharge (Authorisation) Regulations, 2007.

**The provision of information in an application for a waste water discharge Certificate of Authorisation which is false or misleading is an offence under Regulation 35 of the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007).**



Note: Drawings. The following guidelines are included to assist applicants:

- All drawings submitted should be titled and dated.
- All drawings should have a unique reference number and should be signed by a clearly identifiable person.
- All drawings should indicate a scale and the direction of north.
- All drawings should, generally, be to a scale of between 1:20 to 1:500, depending upon the degree of detail needed to be shown and the size of the facility. Drawings delineating the boundary can be to a smaller scale of between 1:1000 to 1:10560, but must clearly and accurately present the required level of detail. Drawings showing the waste water treatment plant location, if such a plant exists, can be to a scale of between 1:50 000 to 1:126 720. All drawings should, however, be A3 or less and of an appropriate scale such that they are clearly legible. Provide legends on all drawings and maps as appropriate.
- In exceptional circumstances, where A3 is considered inadequate, a larger size may be requested by the Agency.

**It should be noted that it will not be possible to process or determine the application until the required documents have been provided in sufficient detail and to a satisfactory standard.**

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## SECTION A: NON-TECHNICAL SUMMARY

*Advice on completing this section is provided in the accompanying Guidance Note.*

A non-technical summary of the application is to be included here. The summary should identify all environmental impacts of significance associated with the discharge of waste water associated with the waste water works. This description should also indicate, where applicable, the hours during which the waste water works is supervised or manned and days per week of this supervision.

The following information must be included in the non-technical summary:

A description of:

- the waste water works and the activities carried out therein,
- the sources of emissions from the waste water works,
- the nature and quantities of foreseeable 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 proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the waste water works,
- further measures planned to comply with the general principle of the basic obligations of the operator, i.e., that no significant pollution is caused;
- measures planned to monitor emissions into the environment.

Supporting information should form **Attachment N° A.1**

### Background

Bohermeen is located in County Meath, approximately 5km west of Navan. The village is accessed via the N51 from Navan and Athboy.

Bohermeen has approximately 50 houses of which 8 are served by a short foul sewer network that discharges into a wastewater treatment system.

### Sewer Network

The sewer system is separated and sewerage is being collected at the back of the houses. The main foul sewer line is a 100mm diameter pipe which is considered sufficient to convey foul flows to the treatment system.

There is no storm overflow within the sewerage infrastructures in Bohermeen.

### Existing Waste Water Treatment Works

The existing treatment system (activated sludge – 1983) is located adjacent to the housing estate. It is closed off by a 1.8m high masonry wall.

It is estimated that the treatment system is designed on the basis of a population equivalent of approximately 100 p.e with the design parameters detailed as follows:

Population Equivalent (p.e.)	100
Total BOD5	6 kg/d
Total Suspended Solids	14 kg/d
Total Dry Weather Flow	18 m3/day
Total peak design flow to be treated (3DWF)	2 m3/h



A search on the Meath County Council planning web site for 2008 and 2009 indicates that there are no approved planning applications proposing to connect to the sewerage scheme. Therefore there is no figure allocated to pending development. For the purpose of this application Meath County Council estimate a projected population of 6 p.e.

The findings of the house count results in population equivalent of 22. The treatment plant was designed to cater for 100 p.e. which equated to a spare capacity of 78 p.e.

There are no non-domestic users connected to the treatment plant.

Meath County Council carried out a flow and load survey for a 14 day period. The results of this survey indicate an average flow of  $18.29\text{m}^3/\text{day}$ . This equates to a population equivalent of 81 (225 l/h/day). This average flow result is higher than the findings of the house count  $4.95\text{m}^3/\text{day}$ . The flow and load survey result may be higher as a result of storm water, surface water and infiltration.

The Bohermeen WWTP is currently operating under capacity. It is envisaged that the WWTP can cater for additional hydraulic and organic load within the design capacity without posing an environmental risk to the receiving water the Clady River.

The treated effluent standards have to comply with the current Urban Wastewater Treatment Regulations, 2001 (S.I. No. 254 of 2001) which gives further effect to EU Council Directives 91/271/EEC, 200/60/EC and 98/15/EC.

The Regulations require agglomerations with a P.E. of less than 2,000, which discharge to freshwater or estuaries to have "appropriate treatment". Appropriate treatment is defined in the Regulations as "treatment of urban wastewater by any process and/or disposal system which after discharge allows the receiving waters to meet the relevant quality objectives and relevant provisions of the Directive and of other Community Directives".

A detailed description of the treatment plant is summarised below :

#### **Aeration unit**

Flows from the estate are discharged into a single tank with partition walls. Within the first part of the tank, biological assimilation of the waste water is achieved. Oxygen is provided by means of a surface aerator located next to the inlet.

The aeration unit of the tank is approximately  $4.15\text{m}^2$ . The depth is 2.5 to 3m.

#### **Settlement unit**

Water from the aeration unit flows over a partition wall and reaches the settlement unit where sludge and treated water are being separated.

The settlement unit of the tank is approximately  $1.5\text{m}^2$ . The depth is 2.0 to 2.5m.

#### **Sludge pumping**

Sludge from the settling process is being pumped and returns to the aeration unit in order to maintain the microbial population.

In the settlement unit, excess sludge is removed on a monthly basis by tanker for further treatment.

#### **Treated Effluent**

The treated effluent overflows from the settlement unit to the outlet manhole. Treated water is then discharged into an open drain that feeds the Clady River.

### **Control system**

The plant is equipped with a control kiosk for the aeration and pumping systems.  
In case of system failure, a radio signal is sent directly to the caretaker.

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## SECTION B: GENERAL

Advice on completing this section is provided in the accompanying Guidance Note.

### B.1 Agglomeration Details

Name of Agglomeration: Bohermeen

#### Applicant's Details

##### Name and Address for Correspondence

Only application documentation submitted by the applicant and by the nominated person will be deemed to have come from the applicant.

Provide a drawing detailing the agglomeration to which the Certificate of Authorisation application relates. It should have the boundary of the agglomeration to which the Certificate of Authorisation application relates clearly marked in red ink.

<b>Name*:</b>	<u>Meath County Council</u>
<b>Address:</b>	<u>County Hall, Railway Street,</u>
	<u>Navan,</u>
	<u>County Meath</u>
<b>Tel:</b>	<u>046-9097000</u>
<b>Fax:</b>	<u>046-9097001</u>
<b>e-mail:</b>	<u>info@meathcoco.ie</u>

\*This should be the name of the Water Services Authority in whose ownership or control the waste water works is vested.

\*Where an application is being submitted on behalf of more than one Water Services Authority the details provided in Section B.1 shall be that of the lead Water Services Authority.

<b>Name*:</b>	<u>Mr. Gerry Boyle, Senior Engineer,</u>
<b>Address:</b>	<u>Meath County Council,</u>
	<u>County Hall, Railway Street,</u>
	<u>Navan,</u>
	<u>County Meath,</u>
<b>Tel:</b>	<u>046-9067455</u>
<b>Fax:</b>	<u>046-9067754</u>
<b>e-mail:</b>	<u>gboyle@meathcoco.ie</u>

\*This should be the name of person nominated by the Water Services Authority for the purposes of the application.

#### Co-Applicant's Details

<b>Name*:</b>	<u>Not Applicable</u>
<b>Address:</b>	
<b>Tel:</b>	
<b>Fax:</b>	
<b>e-mail:</b>	

\*This should be the name of a Water Services Authority, other than the lead authority, where multiple authorities are the subject of a waste water discharge Certificate of Authorisation application.

**Attachment B.1** should contain appropriately scaled drawings / maps ( $\leq A3$ ) of the agglomeration served by the waste water works showing the boundary clearly marked in red ink. These drawings / maps should also be provided as geo-referenced digital drawing files (e.g., ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. These drawings should be provided to the Agency on a separate CD-Rom containing sections B.2, B.3, B.4, B.5, C.1, D.2, E.3 and F.2.

Attachment included	Yes	No
	✓	

## B.2 Location of Associated Waste Water Treatment Plant(s)

Give the location of the waste water treatment plant associated with the waste water works, if such a plant or plants exists.

<b>Name*:</b>	Bohermeen Wastewater Treatment Plant
<b>Address:</b>	Bohermeen
	County Meath
<b>Grid ref (6E, 6N)</b>	East 279846 North 268434
<b>Level of Treatment</b>	Primary and secondary treatment (Activated Sludge)

\*This should be the name of the person responsible for the supervision of the waste water treatment plant.

**Attachment B.2** should contain appropriately scaled drawings / maps ( $\leq A3$ ) of the site boundary and overall site plan, including labelled discharge, monitoring and sampling points. These drawings / maps should also be provided as geo-referenced digital drawing files (e.g., ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. These drawings should be provided to the Agency on a separate CD-Rom containing sections B.1, B.3, B.4, B.5, C.1, D.2, E.3 and F.2.

Attachment included	Yes	No
		✓

## B.3 Location of Primary Discharge Point

Give the location of the primary discharge point, as defined in the Waste Water Discharge (Authorisation) Regulation, associated with the waste water works.

<b>Discharge to</b>	Surface Water – A tributary of the Clady River
<b>Type of Discharge</b>	Point source
<b>Unique Point Code</b>	(P)SW1
<b>Location</b>	Adjacent to the package treatment plant
<b>Grid ref (6E, 6N)</b>	279,841E 268,436N



**Attachment B.3** should contain appropriately scaled drawings / maps ( $\leq A3$ ) of the discharge point, including labelled monitoring and sampling points associated with the discharge point. These drawings / maps should also be provided as geo-referenced digital drawing files (e.g. ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. This data should be provided to the Agency on a separate CD-Rom containing the drawings and tabular data requested in sections B.1, B.2, B.4, B.5, C.1, D.2, E.3 and F.2.

Attachment included	Yes	No
	✓	

#### B.4 Location of Secondary Discharge Point(s)

Give the location of **all** secondary discharge point(s)\* associated with the waste water works. Please refer to Guidance Note for information on Secondary discharge points.

[Not Applicable](#)

<b>Discharge to</b>	Surface Water or Groundwater
<b>Type of Discharge</b>	E.g. Diffuser, Lunar Valve, Non-return flap valve, Point source, via Percolation area, via Soakaways etc.
<b>Unique Point Code</b>	
<b>Location</b>	
<b>Grid ref (6E, 6N)</b>	

\*Where a septic tank is in existence simultaneous to a package plant within an agglomeration, discharges from the septic tank shall be considered as a secondary discharge.

**Attachment B.4** should contain appropriately scaled drawings / maps ( $\leq A3$ ) of the discharge point(s), including labelled monitoring and sampling points associated with the discharge point(s). These drawings / maps should also be provided as geo-referenced digital drawing files (e.g. ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. This data should be provided to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.5, C.1, D.2, E.3 and F.2.

Attachment included	Yes	No
		✓

#### B.5 Location of Storm Water Overflow Point(s)

Give the location of **all** storm water overflow point(s) associated with the waste water works.

[Not Applicable](#)

<b>Type of Discharge</b>	
<b>Unique Point Code</b>	
<b>Location</b>	
<b>Grid ref (6E, 6N)</b>	

**Attachment B.5** should contain appropriately scaled drawings / maps ( $\leq A3$ ) of storm water overflow point(s) associated with the waste water works, including labelled monitoring and sampling points associated with the discharge point(s). These drawings / maps should also be provided as geo-referenced digital drawing files (e.g. ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. This data should be provided to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, C.1, D.2, E.3 and F.2.

Attachment included	Yes	No
		✓

### B.6 Planning Authority

Give the name of the planning authority, or authorities, in whose functional area the discharge or discharges take place or are proposed to take place.

<b>Name:</b>	Meath County Council
<b>Address:</b>	Planning Department, Abbey Mall, Abbey Road, Navan, County Meath
<b>Tel:</b>	046-9097500
<b>Fax:</b>	046-9097001
<b>e-mail:</b>	Planning@meathcoco.ie

Planning Permission relating to the waste water works which is the subject of this application:- (tick as appropriate)

<b>has been obtained</b>	✓	<b>is being processed</b>	
<b>is not yet applied for</b>		<b>is not required</b>	

<b>Local Authority Planning File Reference N°:</b>	No planning files available as the scheme was constructed during 1983.
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**Attachment B.6** should contain **the most recent** planning permission, including a copy of **all** conditions, and where an EIS was required, copies of any such EIS and any certification associated with the EIS, should also be enclosed. Where planning permission is not required for the development, provide reasons, relevant correspondence, etc.

Attachment included	Yes	No
		✓

### B.7 Other Authorities

B.7 (i) Shannon Free Airport Development Company (SFADCo.) area

The applicant should tick the appropriate box below to identify whether the discharge or discharges are located within the Shannon Free Airport Development Company (SFADCo.) area.



**Attachment B.7(i)** should contain details of any or all discharges located within the SFADCo. area.

Within the SFADCo Area	Yes	No
		✓

#### B.7 (ii) Health Services Executive Region

The applicant should indicate the **Health Services Executive Region** where the discharge or discharges are or will be located.

<b>Name:</b>	Health Services Executive North East Region
<b>Address:</b>	Kells, County Meath
<b>Tel:</b>	046-9280500
<b>Fax:</b>	046-9241459
<b>e-mail:</b>	<a href="mailto:info@hseie">info@hseie</a>

#### B. 8(i) Population Equivalent of Agglomeration

**TABLE B.8.1 POPULATION EQUIVALENT OF AGGLOMERATION**

The population equivalent (p.e.) of the agglomeration to be, or being, served by the waste water works should be provided and the period in which the population equivalent data was compiled should be indicated.

<b>Population Equivalent</b>	<b>22 p.e</b>
<b>Data Compiled (Year)</b>	<b>2009</b>
<b>Method</b>	<b>Calculated based on the number of houses connected to the treatment plant based on 8 No. Houses at occupancy of 2.73 p.e. per house.</b>

#### B.8 (ii) Pending Development

Where planning permission has been granted for development(s), but development has not been commenced or completed to date, within the boundary of the agglomeration and this development is being, or is to be, served by the waste water works provide the following information;

- information on the calculated population equivalent (p.e.) to be contributed to the waste water works as a result of those planning permissions granted,
- the percentage of the projected p.e. to be contributed by the non-domestic activities, and
- the ability of the waste water works to accommodate this extra hydraulic and organic loading without posing an environmental risk to the receiving waters.

A search on the Meath County Council planning web site for 2008 and 2009 indicates that there are no approved planning applications proposing to connect

to the sewerage scheme. Therefore there is no figure allocated to pending development. For the purpose of this application Meath County Council estimate a projected population of 6 p.e.

The findings of the house count results in population equivalent of 22. The treatment plant was designed to cater for 100 p.e. which equated to a spare capacity of 78 p.e.

There are no non-domestic users connected to the treatment plant.

Table 1 below summarises the population equivalent connecting to the WWTP.

<b>Estimated Existing Load for Bohermeen WWTP for Year 2009</b>							
Description				DWF (m <sup>3</sup> /d)	BOD (kg/d)	SS (kg/d)	Population Equivalent
	<b>House</b>	<b>Occupancy</b>	<b>Unit Loads</b>	<b>225lhd</b>	<b>0.05kg/ d</b>	<b>0.04kg/ d</b>	
<b>Domestic Load</b>							
Existing Domestic Load	8	2.73	21.84	4.914	1.092	0.8736	22p.e.
<b>Total Domestic Loading (a)</b>				<b>4.914</b>	<b>1.092</b>	<b>0.8736</b>	<b>22p.e.</b>
	<b>Units</b>	<b>Units DWF(m<sup>3</sup>/d)</b>	<b>BOD Total (kg BOD/d)</b>				
<b>Non Domestic Loading</b>							
Commercial – Retail				0	0	0	0p.e.
Industrial Loading				0	0	0	0p.e.
Institutional Loading				0	0	0	0p.e.
<b>Total Non Domestic Load (b)</b>				0	0	0	0p.e.
<b>Total Estimated Existing Load 2009 (a+b)</b>				<b>0</b>	<b>0</b>	<b>0</b>	<b>0p.e.</b>

<b>Estimated Maximum PE for Bohermeen WWTW (2017)</b>			
Source	Existing p.e. (2009)	Pending p.e.	Projected p.e. (2017)
Domestic		15	6
Commercial	22	0	0
Trade Effluent	0	0	0
Imported Liquid Wastes	0	0	0
Sub-total	22	0	6
<b>TOTAL (existing + pending + projected)</b>			
<b>28</b>			
Projected p.e. by 2017 (i.e. the maximum p.e.)			
It is estimated that Bohermeen WWTP will serve a population equivalent of 28 by 2017			

Meath County Council carried out a flow and load survey for a 14 day period. The results of this survey indicate an average flow of 18.29m<sup>3</sup>/day. This equates to a population equivalent of 81 (225 l/h/day). This average flow result is higher than the findings of the house count 4.95m<sup>3</sup>/day. The flow and load survey result may be higher as a result of storm water, surface water and infiltration.

The Bohermeen WWTP is currently operating under capacity. It is envisaged that the WWTP can cater for additional hydraulic and organic load within the design capacity without posing an environmental risk to the receiving water the Clady River.



**B.8 (iii) FEES**

State the relevant Class of waste water discharge as per Regulation 5, and the appropriate fee as per Columns 2 or 3 of the Third Schedule of the Waste Water Discharges (Authorisation) Regulations 2007, S.I. No. 684 of 2007.

Class of waste water discharge	Fee (in €)
	€3000

Appropriate Fee Included	Yes	No
	✓	

**B.9 Capital Investment Programme**

State whether a programme of works has been prioritised for the development of infrastructure to appropriately collect, convey, treat and discharge waste water from the relevant agglomeration. If a programme of works has been prioritised provide details on funding (local or national small schemes programme) allocated to the capital project. Provide details on the extent and type of work to be undertaken and the likely timeframes for this work to be completed.

Not Applicable. Bohermeen is not included in current (2007-2009) Water Services investment programme, however, it has been listed in the 2009 Needs Assessment as a scheme the Council would wish to see progress to planning during the period of the next WSIP (2010-2012). If included by the DoEHLG in the programme works it could be completed by 2016.

Also a private developer has obtained planning permission for a new development in Bohermeen, if this development proceeds the developer will pump waste water from Bohermeen to Navan.

**Attachment B.9** should contain the most recent development programme, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.

Attachment included	Yes	No
		✓

**B.10 Significant Correspondence**

Provide a summary of any correspondence resulting from a Section 63 notice issued by the Agency in relation to the waste water works under the Environmental Protection Agency Acts, 1992 and 2003, as amended by Section 13 of Protection of the Environment Act, 2003.

Not Applicable. No section 63 notices issued for Bohermeen WWTP

**Attachment B.10** should contain a summary of any relevant correspondence issued in relation to a Section 63 notice.

Attachment included	Yes	No
		✓

**B.11 Foreshore Act Licences.**

Provide a copy of the most recent Foreshore Act licence issued in relation to discharges from the waste water works issued under the Foreshore Act 1933.

Not Applicable

**Attachment B.11** should contain the most recent licence issued under the Foreshore Act 1933, including a copy of **all** conditions attached to the licence and any monitoring returns for the previous 12-month period, if applicable.

Attachment included	Yes	No
		√

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## SECTION C: INFRASTRUCTURE & OPERATION

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*Advice on completing this section is provided in the accompanying Guidance Note.*

### C.1 Operational Information Requirements

Provide a description of the plant, process and design capacity for the areas of the waste water works where discharges occur, to include a copy of such plans, drawings or maps (site plans and location maps, process flow diagrams) and such other particulars, reports and supporting documentation as are necessary to describe all aspects of the area of the waste water works discharging to the aquatic environment. Maps and drawings must be no larger than A3 size.

The existing treatment system (activated sludge – 1983) is located adjacent to the housing estate. It is closed off by a 1.8m high masonry wall.

It is estimated that the treatment system is designed on the basis of a population equivalent of approximately 100 p.e with the design parameters detailed as follows:

Population Equivalent (p.e.)	100
Total BOD5	6 kg/d
Total Suspended Solids	14 kg/d
Total Dry Weather Flow	18 m <sup>3</sup> /day
Total peak design flow to be treated (3DWF)	2 m <sup>3</sup> /h

A detailed description of the treatment plant is summarised below :

#### Aeration unit

Flows from the estate are discharged into a single tank with partition walls. Within the first part of the tank, biological assimilation of the waste water is achieved. Oxygen is provided by means of a surface aerator located next to the inlet. The aeration unit of the tank is approximately 4.15m<sup>2</sup>. The depth is 2.5 to 3m.

#### Settlement unit

Water from the aeration unit flows over a partition wall and reaches the settlement unit where sludge and treated water are being separated. The settlement unit of the tank is approximately 1.5m<sup>2</sup>. The depth is 2.0 to 2.5m.

#### Sludge pumping

Sludge from the settling process is being pumped and returns to the aeration unit in order to maintain the microbial population.

In the settlement unit, excess sludge is removed on a monthly basis by tanker for further treatment.

#### Treated Effluent

The treated effluent overflows from the settlement unit to the outlet manhole. Treated water is then discharged into an open drain that feeds the Clady River.

#### Control system

The plant is equipped with a control kiosk for the aeration and pumping systems. In case of system failure, a radio signal is sent directly to the caretaker.

### C.1.1 Storm Water Overflows

For each storm water overflow within the waste water works the following information shall be submitted:

- An assessment to determine compliance with the criteria for storm water overflows, as set out in the DoEHLG '*Procedures and Criteria in Relation to Storm Water Overflows*', 1995 and any other guidance as may be specified by the Agency, and
- Identify whether any of the storm water overflows are to be decommissioned, and identify a date by which these overflows will cease, if applicable.

Not Applicable. No storm overflows within the waste water treatment works.

### C.1.2 Pumping Stations

For each pump station operating within the waste water works, provide details of the following:

- Number of duty and standby pumps at each pump station;
- The measures taken in the event of power failure;
- Details of storage capacity at each pump station;
- Frequency and duration of activation of emergency overflow to receiving waters. Clarify the location where such discharges enter the receiving waters.

Not applicable. No pumping stations within the Bohermeen Sewerage Scheme.

**Attachment C.1** should contain supporting documentation with regard to the plant and process capacity, systems, storm water overflows, emergency overflows, etc., including flow diagrams of each with any relevant additional information. These drawings / maps should also be provided as geo-referenced digital drawing files (e.g. ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. This data should be provided to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, D.2, E.3 and F.2.

Attachment included	Yes	No
	✓	



## SECTION D: DISCHARGES TO THE AQUATIC ENVIRONMENT

*Advice on completing this section is provided in the accompanying Guidance Note.*

Give particulars of the source, location, nature, composition, quantity, level and rate of discharges arising from the agglomeration and, where relevant, the period or periods during which such discharges are made or are to be made.

Details of all discharges of waste water from the agglomeration should be submitted via the following web based link: [http://78.137.160.73/epa\\_wwd\\_licensing/](http://78.137.160.73/epa_wwd_licensing/). The applicant should address in particular all discharge points where the substances outlined in Tables 'Emissions to Surface/Groundwaters' and 'Dangerous Substances Emissions' are emitted

Where it is considered that any of the substances listed in Annex X of the Water Framework Directive (2000/60/EC) or any of the Relevant Pollutants listed in Annex VIII of the Water Framework Directive (2000/60/EC) are being discharged from the waste water works or are seen to be present in the receiving water environment downstream of a discharge from the works (as a result of any monitoring programme, e.g., under the Water Framework Directive Programme of Measures) the applicant shall screen the discharge for the relevant substance.

Correspondence was sent to the Eastern RBD office and the National Parks and Wildlife Services on the 12<sup>th</sup> November 2009. A copy of the correspondence is included in Attachment D. No response was received.

### D.1(i) Discharges to Surface Waters

Details of all discharges of waste water from the agglomeration should be supplied via the following web based link: [http://78.137.160.73/epa\\_wwd\\_licensing/](http://78.137.160.73/epa_wwd_licensing/). Tables 'Discharge Point Details', 'Emissions to Surface/Groundwaters' and 'Dangerous Substances Emissions', should be completed for the primary discharge point from the agglomeration and for **each** secondary discharge point, where relevant. Table 'Discharge Point Details' should be completed for **each** storm water overflow. Individual Tables must be completed for each discharge point.

Where monitoring information is available for the influent to the waste water treatment plant this data should also be provided in response to Section D.1(i). Supporting information should form **Attachment D.1(i)**

Attachment included	Yes	No
	✓	



## D.1(ii) Discharges to Groundwater

Details of all discharges of waste water from the agglomeration should be supplied via the following web based link: [http://78.137.160.73/epa\\_wwd\\_licensing/](http://78.137.160.73/epa_wwd_licensing/). Tables 'Discharge Point Details', 'Emissions to Surface/Groundwaters and 'Dangerous Substances Emissions', should be completed for the primary discharge point from the agglomeration and for **each** secondary discharge point, where relevant. Table 'Discharge Point Details' should be completed for **each** storm water overflow. Individual Tables must be completed for each discharge point.

Where monitoring information is available for the influent to the waste water treatment plant this data should also be provided in response to Section D.1(ii).

Supporting information should form **Attachment D.1(ii)**  
**Not Applicable**

Attachment included	Yes	No
		✓

## D.1 (iii) Private Waste Water Treatment Plants

Provide information on all independently owned/operated private waste water treatment plants operating within the agglomeration. Submit a copy of the Section 4 discharge licence issued under the Water Pollution Acts 1977 to 1990, as amended for each discharge.

**Not Applicable**

## D.2 Tabular Data on Discharge Points

Applicants should submit the following information for each discharge point:

**Table D.2:**

PT_CD	PT_TYPE	LA_NAME	RWB_TYPE	RWB_NAME	DESIGNATION	EASTING	NORTHING
Point Code Provide label ID's	Point Type (e.g., Primary/ Secondary/ Storm Water Overflow)	Local Authority Name (e.g., Donegal County Council)	Receiving Water Body Type (e.g., River, Lake, Groundwater, Transitional, Coastal)	Receiving Water Body Name (e.g., River Suir)	Protected Area Type (e.g., SAC, candidate SAC, NHA, SPA etc.)	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference
(P)SW1	Primary	Meath County Council	River Water Body	Tributary of Clady River		279,841	268,436

An individual record (i.e. row) is required for each discharge point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at [www.epa.ie](http://www.epa.ie). This data should be submitted to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, C.1, E.3 and F.2.

## SECTION E: MONITORING

*Advice on completing this section is provided in the accompanying Guidance Note.*

### E.1 Waste Water Discharge Frequency and Quantities – Existing & Proposed

Provide an estimation of the quantity of waste water likely to be emitted in relation to all primary and secondary discharge points applied for. This information should be included in Table 'Discharge Point Details' via the following web based link: [http://78.137.160.73/epa\\_wwd\\_licensing/](http://78.137.160.73/epa_wwd_licensing/).

Provide an estimation of the quantity of waste water likely to be emitted in relation to all storm water overflows within the agglomeration applied for. This information should be included in Table 'Discharge Point Details' via the following web based link: [http://78.137.160.73/epa\\_wwd\\_licensing/](http://78.137.160.73/epa_wwd_licensing/).

Indicate if composite sampling or continuous flow monitoring is in place on the primary or any other discharge points. Detail any plans and timescales for the provision of composite sampling and continuous flow monitoring.

Not Applicable. No composite sampling or continuous flow monitor is in place at Bohermeen. Meath County Council has no plans for the provision of sampling or flow monitors.

### E.2. Monitoring and Sampling Points

Programmes for environmental monitoring should be submitted as part of the application. These programmes should be provided as Attachment E.2.

Reference should be made to, provision of sampling points and safe means of access, sampling methods, analytical and quality control procedures, including equipment calibration, equipment maintenance and data recording/reporting procedures to be carried out in order to ensure accurate and reliable monitoring.

In determining the sampling programme to be carried out, the variability of the discharge and its effect on the receiving environment should be considered.

Not applicable. No sampling programme is in place at present.

Details of any accreditation or certification of analysis should be included.

**Attachment E.2** should contain any supporting information.

Attachment included	Yes	No
		✓

### E.3. Tabular data on Monitoring and Sampling Points

Applicants should submit the following information for each monitoring and sampling point:

PT_CD	PT_TYPE	MON_TYPE	EASTING	NORTHING	VERIFIED
Point Code Provide label ID's assigned in section E of application	Point Type (e.g., Primary, Secondary, Storm Water Overflow)	Monitoring Type M = Monitoring S = Sampling	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used
(P)SW1	Primary	Sampling	279,841	268,436	y

An individual record (i.e., row) is required for each monitoring and sampling point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at [www.epa.ie](http://www.epa.ie). This data should be submitted to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, C.1, D.2 and F.2.

### E.4 Sampling Data

Regulation 24(i) of the Waste Water Discharge (Authorisation) Regulations 2007 requires all applicants in the case of an existing discharge to specify the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application.

No sampling data available for the 12 months preceding this application.

Regulation 24(m) requires applicants to give details of compliance with any applicable monitoring requirements and treatment standards.

**Attachment E.4** should contain any supporting information.

Attachment included	Yes	No
	✓	



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## SECTION F: EXISTING ENVIRONMENT & IMPACT OF THE DISCHARGE(S)

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*Advice on completing this section is provided in the accompanying Guidance Note.*

Clear and concise information is required to enable the Agency to assess the existing receiving environment. This section requires the provision of information on the ambient environmental conditions within the receiving water(s) upstream and downstream of any discharge(s) and/or the ambient environmental conditions of the groundwater upgradient and downgradient of any discharges.

Where development is proposed to be carried out, being development which is of a class for the time being specified under Article 24 (First Schedule) of the Environmental Impact Assessment Regulations, the information on the state of the existing environment should be addressed in the EIS. **In such cases, it will suffice for the purposes of this section to provide adequate cross-references to the relevant sections in the EIS.**

### F.1. Impact on Receiving Surface water or Groundwater

- Details of monitoring of the receiving surface water should be supplied via the following web based link: [http://78.137.160.73/epa\\_wwd\\_licensing/](http://78.137.160.73/epa_wwd_licensing/). Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details' should be completed for the primary discharge point. Surface water monitoring locations upstream and downstream of the discharge point shall be screened for those substances listed in Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details'. Monitoring of surface water shall be carried out at not less than two points, one upstream from the discharge location and one downstream.
- Details of monitoring of the receiving ground water should be supplied via the following web based link: [http://78.137.160.73/epa\\_wwd\\_licensing/](http://78.137.160.73/epa_wwd_licensing/). Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details' should be completed for the primary discharge point. Ground water monitoring locations upgradient and down gradient of the discharge point shall be screened for those substances listed in Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details'. Monitoring of ground water shall be carried out at not less than two points, one upgradient from the discharge location and one downgradient.  
[Not Applicable](#)
- For discharges from secondary discharge points Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details' should be completed.  
[Not Applicable](#)
- Describe the existing environment in terms of water quality with particular reference to environmental quality standards or other legislative standards. Submit a copy of the most recent water quality management plan or catchment management plan in place for the receiving water body.



Give details of any designation under any Council Directive or Regulations that apply in relation to the receiving surface or groundwater.

The Water Framework Directive (2000/60/EC) requires, *inter alia*, a review of the impact of human activity on the status of surface waters and groundwater. The review requires an assessment of the likelihood that water bodies in river basin districts will fail to meet the Directive's environmental objectives. A four-category risk classification scheme has been adopted by the Risk Assessment Working group in Ireland as follows:

EU Commissions reporting risk categories for water bodies	Irish equivalent reporting categories for water bodies
Water bodies for which it is already clear without the need for further characterisation or additional monitoring data, that the objectives will be failed;	<b>1a - Water Body at significant risk</b> on the basis of available information for which confidence in the available information being comprehensive and reliable is high
Water bodies for which it is possible that the objectives of the Directive will be failed but, because of inadequate data, further characterisation and operational monitoring are considered necessary to be sufficiently confident that this is the case;	<b>1b - Water Body probably at significant risk</b> but for which further information will be needed to confirm that this view is correct
	<b>2a - Water Body probably not at significant risk</b> on the basis of available information for which confidence in the available information being comprehensive and reliable is lower
Water bodies for which it is already clear, without the need for further characterisation or additional monitoring data, that the achievement of the objectives are not at risk.	<b>2b - Water Body not at risk</b> on the basis of available information for which confidence in the available information being comprehensive and reliable is high

**Table 1** Water Framework Directive Category Risk Classification

The Bohermeen waste water treatment plant discharges treated effluent into a ditch which drains into the River Clady which is located 0.3km east of the discharge point. The River Clady is a tributary of the River Boyne. The discharge point is in the **Eastern River Basin District** and has an Overall Risk Category under the Water Frame Work Directive of a **1a, Water Body at significant risk**. The River Clady is at risk as a result of Morphological Risk Assessment – Channelisation. See attachment F.1 for reports. The overall water status is moderate with the main objective to restore the river water quality.

The Local Government (Water Pollution) Act, 1977 (Water Quality Phosphorus) regulations, 1998 (S.I 258/1998) implements in part **EU Directive 76/464/EEC on pollution caused by substances discharged into the aquatic environment**. The regulations require that water quality has to be maintained or improved by reference to the Biological Quality (Q) Rating assigned by the EPA in 1997. Waters, which have specified unsatisfactory Biological Quality (Q) Ratings in 1997(or the



first available data thereafter) must be improved to achieve specified minimum target Q or median annual molybdate-reactive phosphorus (MRP) values by 2007. There is a strong statistical relationship between biological Q-ratings and MRP concentrations in Irish rivers. The empirical relationship suggests that, once annual median MRP values exceed 30µg P/l, there is a strong statistical likelihood that the river reach in question will have a significant eutrophication problem. Therefore either Q or median MRP targets can be used as a measure of achievement of the standards set in the regulations (Cleneghan, C., 2003 *Phosphorous regulations national Implementation report*, 2003 EPA).

The EPA biological monitoring point for the Bohermeen waste water treatment plant is located on the Clady River (downstream). There is currently no upstream monitoring point for the wastewater treatment plant on the River Clady. The downstream monitoring point is summarised below in table 2. Target and current values at the monitoring point are as follows:

EPA monitoring point No.***	Location of monitoring point w.r.t Bohermeen WWT discharge point	Q value (1996)	Q Value (2003) *	Minimum Target Q to be achieved by 2007	Median MRP (µg P/l) to be achieved by 2007**
N/A	Upstream	N/A	N/A	N/A	N/A
07B041600	Downstream	3-4	3-4	4	30

\* Most recent published data is 2000

\*\* There is currently no MRP data available for the EPA monitoring stations on the River Clady.

\*\*\* There is no upstream monitoring point for the River Clady.

**Table 2** Current and Target Q and median MRP values for EPA monitoring points on the River Clady.

In general, Q values equal to 4 or above 4 are considered as satisfactory, whereas values below 4 are considered unsatisfactory, therefore in general a Q4 or greater value is aspired to in terms of biological quality (Toner et al, 2005 Water Quality in Ireland 2001-2003).

The parameters, which have defined thresholds in the general characteristics for each Q class and which are measurable in terms of the wastewater treatment works discharge are: Maximum BOD, Dissolved Oxygen (DO) and (Annual Median) orthophosphate. Phosphate data is available and is considered broadly comparable to orthophosphate for the purposes of surface water biological quality. Therefore for the purpose of comparing water quality with standards to be achieved in the phosphorus regulations, Q values as represented by the parameters BOD, DO and orthophosphate/phosphate are used.

The requirement for the monitoring station downstream of the site to maintain Q4 by 2007, Q4 will be taken as the standard to be maintained in the receiving waters.

The River Clady is not designated as a Salmonid river under the European Communities Quality of Salmonid Rivers Regulations, SI 293/1988.



Table 3 summarises the environmental quality standards to be achieved in the receiving waters for parameters associated with discharge from the wastewater treatment plant.

Following the precautionary principle, the most stringent of these standards should be adopted where more than one standard exists.

Parameter	Standard	Standard Source
Max. BOD	<3 mg/l	Q4 value: WFD (2000/60/EC) & Phosphorus Regulations (S.I 258/1998)
Dissolved Oxygen	80-120%	Q4 value: WFD (2000/60/EC) & Phosphorus Regulations (S.I 258/1998)
Annual Median PO <sub>4</sub> /Orthophosphate	0.03 mg P/l	Q4 value: WFD (2000/60/EC) & Phosphorus Regulations (S.I 258/1998)

**Table 3** Quality Standards to be achieved in the Clady River.

Meath County Council's Phosphorus Regulations Implementation Report 2006 and sample results are included in Attachment F.1

According to the Urban Waste Water Treatment Regulations, 1994 "appropriate" treatment to meet the standards set out in these regulations is what is required at the Bohermeen Treatment Works.

The Clady River is within the Boyne Catchment. The River Boyne Water Quality Management Plan November 1997 is included in Attachment F.1.

- Provide a statement as to whether or not emissions of main polluting substances (as defined in the *Dangerous Substances Regulations S.I. No. 12 of 2001*) to water are likely to impair the environment.  
There is no industry connecting to the treatment plant or any evidence to suggest that there are sources within the agglomeration or discharge itself which would lead to emissions of the main polluting substances (as defined in the *Dangerous Substances Regulations S.I. No. 12 of 2001*)
- In circumstances where drinking water abstraction points exist downstream/down gradient of any discharge describe measures to be undertaken to ensure that discharges from the waste water works will not have a significant effect on faecal coliform, salmonella and protozoan pathogen numbers, e.g., *Cryptosporidium* and *Giardia*, in the receiving water environment.  
Not Applicable. No drinking water abstraction point downstream from the waste water treatment plant.
- Indicate whether or not emissions from the agglomeration or any plant, methods, processes, operating procedures or other factors which affect such emissions are likely to have a significant effect on –
  - (a) a site (until the adoption, in respect of the site, of a decision by the European Commission under Article 21 of Council Directive 92/43/EEC for the purposes of the third paragraph of Article 4(2) of that Directive) —

- (i) notified for the purposes of Regulation 4 of the Natural Habitats Regulations, subject to any amendments made to it by virtue of Regulation 5 of those Regulations,
- (ii) details of which have been transmitted to the Commission in accordance with Regulation 5(4) of the Natural Habitats Regulations, or
- (iii) added by virtue of Regulation 6 of the Natural Habitats Regulations to the list transmitted to the Commission in accordance with Regulation 5(4) of those Regulations,

The Bohermeen waste water treatment plant and discharge point does not lie within the boundaries of a designated area of conservation and there are no designated conservations areas in close proximity to the site. The closest environmental designation of conservation concern is Jamestown Bog NHA. It is located 1.7 km south west of the waste water treatment plant.

- (b) a site adopted by the European Commission as a site of Community importance for the purposes of Article 4(2) of Council Directive 92/43/EEC<sup>1</sup> in accordance with the procedures laid down in Article 21 of that Directive,

A search on the National Parks and Wildlife Services showed that there are no sites within close proximity to the Bohermeen waste water treatment plant and discharge point receiving waters.

- (c) a special area of conservation within the meaning of the Natural Habitats Regulations, or

Not Applicable

- (d) an area classified pursuant to Article 4(1) or 4(2) of Council Directive 79/409/EEC<sup>2</sup>;

<sup>1</sup>Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ No. L 206, 22.07.1992)

<sup>2</sup>Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds (OJ No. L 103, 25.4.1979)

Correspondence was sent to National Parks and Wildlife Services on the 12<sup>th</sup> November regarding the discharge certificate application. No response received to date.

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

Attachment included	Yes	No
	✓	



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

Applicants should submit the following information for each downstream or downgradient drinking water abstraction point. The zone of contribution for the abstraction point should be delineated and any potential risks from the waste water discharge to the water quality at that abstraction point identified.

ABS_CD	AGG_SERVED	ABS_VOL	PT_CD	DIS_DS	EASTING	NORTHING	VERIFIED
Abstraction Code	Agglomeration served	Abstraction Volume in m <sup>3</sup> /day	Point Code Provide label ID's	Distance Downstream in meters from Emission Point to Abstraction Point	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used

**Note:** Attach any risk assessment that may have been carried out in relation to the abstraction point(s) listed.

An individual record (i.e. row) is required for each abstraction point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at [www.epa.ie](http://www.epa.ie). This data should be submitted to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, C.1, D.2 and E.3.

Not Applicable. No drinking water abstraction points downstream from the waste water treatment plant.

**Attachment F.2** should contain any supporting information.

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## SECTION G: PROGRAMMES OF IMPROVEMENTS

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*Advice on completing this section is provided in the accompanying Guidance Note.*

### G.1 Compliance with Council Directives

Provide details on a programme of improvements to ensure that emissions from the agglomeration or any premises, plant, methods, processes, operating procedures or other factors which affect such emissions will comply with, or will not result in the contravention of the;

There is no programme of improvements scheduled for the Bohermeen agglomeration.

- Dangerous Substances Directive 2006/11/EC,  
This regulation outlines the annual mean concentration of the following substances, which must not be exceeded; Pesticides and Solvents – Atrazine, Dichloromethane, Simazine, Toluene, Tributyltin and Xylenes. Metals and solvents – Arsenic, Chromium, Copper, Cyanide, Fluoride, Lead, Nickel and Zinc. The Bohermeen treatment plant caters for domestic waste water only. It is not envisaged that any of the above substances are discharged into the agglomeration.
- Water Framework Directive 2000/60/EC,  
The fundamental objective of the WFD aims at maintaining “good status” in relation to all waters by 2015 and that status does not deteriorate in any water. The Bohermeen waste water treatment plant discharges into the Clady River in the Eastern River Basin District and has an overall risk category of 1a “at significant risk”. This is a result of the EPA diffuse model 2008. The ERBD recognises that not all aims of WFD are achievable by 2015 and hence sets 2021 for substantial compliance and 2027 for full compliance.  
The point source result for point source (WWTP) is 2b “not at risk”. It is therefore considered that the waste water treatment plant is not causing any negative effect on the Clady River.
- Birds Directive 79/409/EEC,  
The waste water treatment plant and discharge point is not located within a SPA. Therefore it is anticipated that Bohermeen WWTP will not have an impact on the Birds Directive.
- Groundwater Directives 80/68/EEC & 2006/118/EC,  
There are no emissions to groundwater.
- Drinking Water Directives 80/778/EEC,  
There is no drinking water abstraction point downstream from the WWTP.
- Urban Waste Water Treatment Directive 91/271/EEC,  
The Bohermeen WWTP shall produce a treated effluent to the Guidelines of the Urban Waste Water Treatment Directive.
- Habitats Directive 92/43/EEC,  
The Clady River is not designated as an SAC or SPA.
- Environmental Liabilities Directive 2004/35/EC,  
This directive relates to certain occupational activities, including the operational of installations under IPPC, the waste framework directive, the landfill directive and the waste incineration directive and activities under proposed extractive industry waste directive. None of these apply to Bohermeen agglomeration.
- Bathing Water Directive 76/160/EEC, and  
The directive is not applicable
- Shellfish Waters Directive (2006/113/EC).  
The directive is not applicable.

**Attachment G.1** should contain the most recent programme of improvements, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.

Attachment included	Yes	No
		✓

## **G.2 Compliance with the European Communities Environmental Objectives (Surface Waters) Regulations 2009**

Provide details on a programme of improvements, including any water quality management plans or catchment management plans in place, to ensure that improvements of water quality required under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 are being achieved. Provide details of any specific measures adopted for waste water works specified in Phosphorus Measures Implementation reports and the progress to date of those measures. Provide details highlighting any waste water works that have been previously identified as the principal sources of pollution under the Phosphorous Regulations (S.I. No. 258 of 1998).

The Phosphorus Regulations (S.I. No. 258 of 1998) are discussed in detail in section F.

The Clady River is within the Boyne Catchment. The River Boyne Water Quality Management Plan November 1997 is included in Attachment F.1.

**Attachment G.2** should contain the most recent programme of improvements and any associated documentation requested under Section G.3 of the application.

Attachment included	Yes	No
		✓

## **G.3 Impact Mitigation**

Provide details on a programme of improvements to ensure that discharges from the agglomeration will not result in significant environmental pollution.

Not Applicable. Bohermeen is not included in current (2007-2009) Water Services investment programme, however, it has been listed in the 2009 Needs Assessment as a scheme the Council would wish to see progress to planning during the period of the next WSIP (2010-2012). If included by the DoEHLG in the programme works could be completed by 2016.

**Attachment G.3** should contain the most recent programme of improvements, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.

Attachment included	Yes	No
		✓



#### G.4 Storm Water Overflows

Provide details on a programme of improvements to ensure that discharges other than the primary and secondary discharges comply with the definition of 'storm water overflow' as per Regulation 3 of the Waste Water Discharge (Authorisation) Regulations, 2007.

Not applicable. No storm overflows.

**Attachment G.4** should contain the most recent programme of improvements, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.

Attachment included	Yes	No
		✓

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## SECTION H: DECLARATION

### Declaration

I hereby make application for a waste water discharge Certificate of Authorisation/revised Certificate of Authorisation, pursuant to the provisions of the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007).

I certify that the information given in this application is truthful, accurate and complete.

I give consent to the EPA to copy this application for its own use and to make it available for inspection and copying by the public, both in the form of paper files available for inspection at EPA and local authority offices, and via the EPA's website.

This consent relates to this application itself and to any further information or submission, whether provided by me as Applicant, any person acting on the Applicant's behalf, or any other person.

Signed by Eugene Cummins  
(on behalf of the organisation)

Date : 8.12.8

Print signature name: EUGENE CUMMINS

Position in organisation: DIRECTOR OF SERVICES, INFRASTRUCTURE

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## SECTION I: JOINT DECLARATION

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### Joint Declaration <sup>Note1</sup>

I hereby make application for a waste water discharge Certificate of Authorisation /revised Certificate of Authorisation, pursuant to the provisions of the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007).

I certify that the information given in this application is truthful, accurate and complete.

I give consent to the EPA to copy this application for its own use and to make it available for inspection and copying by the public, both in the form of paper files available for inspection at EPA and local authority offices, and via the EPA's website.

This consent relates to this application itself and to any further information or submission whether provided by me as Applicant, any person acting on the Applicant's behalf, or any other person.

### Lead Authority

**Signed by :** \_\_\_\_\_ **Date :** \_\_\_\_\_  
(on behalf of the organisation)

**Print signature name:** \_\_\_\_\_

**Position in organisation:** \_\_\_\_\_

### Co-Applicants

**Signed by :** \_\_\_\_\_ **Date :** \_\_\_\_\_  
(on behalf of the organisation)

**Print signature name:** \_\_\_\_\_

**Position in organisation:** \_\_\_\_\_

**Signed by :** \_\_\_\_\_ **Date :** \_\_\_\_\_  
(on behalf of the organisation)

**Print signature name:** \_\_\_\_\_

**Position in organisation:** \_\_\_\_\_

**Note 1:** In the case of an application being lodged on behalf of more than a single Water Services Authority the following declaration must be signed by all applicants.