Comhairle Contae Chorcaí Cork County Council

Environmental Protection Agency, Office of Climate change and resource Unit, Licensing Unit, P.O. Box 3000, Johnstown Castle Estate, Co. Wexford. Annabella, Mallow, Co. Cork. Tel: (022) 21123 • Fax: (022)21983 Email: northcork@corkcoco.ie Web: www.corkcoco.ie Annabella, Mala, Co. Chorcaí.



Co. Chorcaí. Fón: (022) 21123 • Faics: (022) 21983 R-phost: northcork@corkcoco.ie Suíomh Gréasáin: www.corkcoco.ie

June 2009

Re: Waste Water Discharge Licence Application for the Agglomeration of Conna

Dear Sir / Madam,

Please find enclosed Cork County Council's Waste Water Discharge Licence Application for the agglomeration of Conna.

The following documentation is enclosed

- 1 Nr. signed original in hardcopy
- 1 Nr. copy in hardcopy
- 2 Nr. CD-ROM with all documentation in electronic searchable PDF
- 1 Nr. CD-ROM with AutoCAD, Excel Data, Table D.2, Table E.3 and F.2

The content of the electronic files is a true copy of the original hardcopy.

Payment of €10,000 Licence Fee is by Electronic means.

Signed:

Hel ann

Frank Cronin Senior Engineer – Water Services Environmental Protection Agency

2 2 JUN 2009



WWD Application Form Version 6/08

This is a draft document and is subject to revision.



Waste Water Discharge Licence

| Con | |
|-------------------|--|
| EPA Ref. Nº: | |
| (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: <u>www.epa.ie</u>Email: info@epa.ie

Tracking Amendments to Draft Application Form

| Version | Date | Amendment since | Reason |
|---------|----------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No. | | previous version | |
| V. 1. | 11/10/07 | N/A | |
| V. 2. | 18/10/07 | Inclusion of a Note 1 superscript for Orthophosphate in Tables D.1(i)(b) & D.1(ii)(b). | To highlight the requirement for filtered samples in measurement of O-Phosphate for waste water discharges. |
| V.3. | 13/11/07 | Amend wording of Section F.2 to include 'abstraction'. | To accurately reflect the information required |
| | | Amend wording of Checklist in Annex to reflect wording of Regulation 16(5) of S.I. No. 684 of 2007. | To accurately reflect the Regulations and to obtain the application documentation in appropriate format. |
| | | Inclusion of uniquesepoint code for each point of discharge and storm water overflow. | To aid in cross-referencing of application documentation. |
| V.4 | 18/04/08 | Inclusion of requirement to provide name of agglomeration to which the application relates. | To accurately determine the agglomeration to be licensed. |
| | | Amend wording of Section B.7. (iii) to reflect the title of Water Services Authority. | To accurately reflect the Water Services Act, 2007. |
| | | Addition of new Section B.9 (ii) in order to obtain information on developments yet to contribute to the waste | To obtain accurate population equivalent figures for the agglomeration. |
| | | water works. Addition of sub-sections C.1.1 & C.1.2 in order to clarify information required for Storm water overflow | To obtain accurate information on design and spill frequency from these structures. |
| | | and pumping stations within the works. Amend Section D.1 to include a requirement for monitoring data for influent | B. S. DUN, MARKEN, M. ANDRES M. DRAWLING, MARKEN, M. MARKEN, MARKEN, MARKEN, MARKEN, MARKEN, MARKEN, MARKEN, MARKE |

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EPA Export 26-07-2013:14:49:53

Waste Water Discharge Authorisation Application Form

| V.5 07/07/2008 | to waste water treatment plants, where available. Amend wording of Section E.1 to request information on composite sampling/flow monitoring provisions. Amend wording of B.7 (iii) | the plant. To acquire accurate information on the sampling and monitoring provisions for discharges from the works. |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| V.5 07/07/2008 | E.1 to request information on composite sampling/flow monitoring provisions. Amend wording of B.7 (iii) | sampling and monitoring provisions for discharges from the works. |
| V.5 07/07/2008 | on composite sampling/flow monitoring provisions. Amend wording of B.7 (iii) | provisions for discharges from the works. |
| V.5 07/07/2008 | Amend wording of B.7 (iii) | |
| V.5 07/07/2008 | | To possible unfloat the |
| | to include reference to Water Services Authorities. | To accurately reflect the Water Services Act, 2007 requirements. |
| | Amend Section G.1 to include Shellfish Waters Directive. | |
| V.6 26/08/2007 | Amendments to Section D to reflect new web based reporting. | To clarify the reporting requirements. |
| · | Amended requirements for reporting on discharges under E.1 Waste Water Discharge Frequency and Quantities. | To streamline reporting requirements. |
| , | Amendment to Section F.1 to specify the type of monitoring and reporting required for the background environment. | To [©] clarify the reporting requirements for ambient monitoring. |
| | Removal of Annexes to application form. | To reflect the new web based reporting requirements. |
| | Consett of co. | |

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Waste Water Discharge Authorisation Application Form

Environmental Protection Agency Application for a Waste Water Discharge Licence Waste Water Discharge (Authorisation) Regulations 2007.

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ANNEX 1: TABLES/ATTACHMENTS

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Waste Water Discharge Authorisation Application Form

ABOUT THIS APPLICATION FORM

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

The Application Form **must** be completed in accordance with the instructions and guidance provided in the *Waste Water Discharge Licensing Application Guidance Note*. The Guidance Note gives an overview of Waste Water Licensing, outlines the licence 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.

A valid application for a Waste Water Discharge Licence must contain the information prescribed in the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007). Regulation 16 of the Regulations sets out the statutory requirements for information to accompany a licence 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 in respect of Regulation 16 requirements, please complete the Regulation 16 Checklest provided in Annex 2.

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 lability 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.

PROCEDURES

The procedure for making and processing of applications for waste water discharge licences, and for the processing of reviews of such licences, appear 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.

Prior to submitting an application the applicant must publish in a newspaper circulating in the area, and erect at the point nearest to the waste water treatment plant concerned or, if no such plant exists, at a location nearest the primary discharge point, a notice of intention to apply. An applicant, not being the local authority in whose functional area the relevant waste water discharge, or discharges, to which the relevant application relates, takes place or is to take place, must also notify the relevant Local Authority, in writing, of their intention to apply.

An application for a licence must be submitted on the appropriate form (available from the Agency) 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. <u>The abbreviation "N/A" should not be used</u>.

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 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 licence is an offence under the Waste Water Discharge (Authorisation) Regulations, 2007.

Conna Application Rev1

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The provision of information in an application for a waste water discharge licence 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: <u>Drawings.</u> The following guidelines are included to assist applicants:

- All drawings submitted should be titled and dated.
- All drawings should have a <u>unique reference number</u> and should be signed by a clearly identifiable person.
- All drawings should indicate a scale and the <u>direction of north</u>.
- 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.

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 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 Attackment Nº A.1

SECTION A: NON-TECHNICAL SUMMARY

Conna is situated 14km East of Rathcormac on the R628. The village is well developed from the point of public services such as a primary school, shops and amenities.

The waste water from the Conna allglomeration is currently treated by a package treatment plant prior to been discharged to the River Bride.

The Waste Water Works and the Activities Carried Out Therein

Conna wastewater treatment plant (WWTP) was constructed in 2001. The compound is located adjacent to the River Bride.

The main elements of the WWTP are;

- 1. Preliminary Treatment: Automatic Screen
- 2. Secondary treatment: Biofilm process, 'all in one' treatment plant.
- 3. Discharge to River Bride

The wastewater in Conna is collected in a partially combined foul and sewer drainage network and gravitates to the wastewater treatment plant.

In a high storm water event, the inlet works surcharge and the excess waste stream is diverted to a storm water holding tank where it is stored until the storm surge has abated.

Conna WWTP is operated by the staff of Cork County Council whose duties also involve the maintenance of a number of other small WWTP's in the area. The caretaker is on duty from 8.00a to 5.30pm Monday – Saturday.

The sources of emissions from the waste water works

The pollution load from the Conna agglomeration arises from the following areas:

- Domestic population
- Commercial premises
- School & crèches
- Infiltration

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

The main source of emissions from the works is via a 200mm open pipe outfall to the River Bride. The River Bride flows along the Northern boundary of the Compound.

The forward feeding pump sump/ storm water holding tank is fitted with an overflow discharge to the River Bride which may come into use during prolonged storm water events.

In the case of a power outage, the forward feed pump sump within the compound will contain incoming sewage. In the event of prolonged outage, the

forward feeding sump is fitted with an emergency overflow discharge to the River Bride.

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 wastewater treatment plant treats only municipal waste water from Village and it environs via the sewerage collection system which is discharged to the River Bride. The normal DWF from the WWTP is of the magnitude of $100m^3/day$ (flow meter).

During power black outs, the waste stream will back up the pump sump and will overflow in the pre-existing septic tank which will discharge directly to the effluent stream prior to the discharge point. There is no flow data for the discharge from this tank.

The proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the waste water works

The treatment works consists of the following elements:

- Automatic 6mm screen with manual screen bypass. Screenings are macerated and dewatered and stored in a wheelie bin for suitable disposal off-site.
- Two BL4000 Blivet Units. 'All in one' treatment plant which contains the only any following; 505
 - Primary settlement.
 - o Aerobic treatment, combined fixed film reactor and active Pection Perfect aeration system.
 - Final settlement.
 - Sludge storage.
- Surface water holding tank with duty/standby forward feed pumps and screened emergency overflow baffle.

The treatment plant does not have a backup power generation system.

The WWTP shall be operated and managed in accordance with the Performance Management System, developed by the Water Service National Training Group (WSMTG).

Further measures planned to comply with the general principle of the basic obligations of the operator, i.e., that no significant pollution is caused

There are no planned works to upgrade for the treatment plant

Measures planned to monitor emissions into the environment

The Cork County Council Environmental Department located in Mallow takes samples from the River Bride upstream and downstream of the wastewater treatment plant approximately 2 times per year. Samples of the influent and effluent are also taken at these times.

The wastewater treatment plant is equipped with an automatic sampler on the effluent stream.

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

Consent of copyright owner required for any other use.

SECTION B: GENERAL

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

B.1 Agglomeration Details

Name of Agglomeration: Conna & Environs

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 licence application relates. It should have the boundary of the agglomeration to which the licence application relates <u>clearly marked in red ink</u>.

| Name*: | Cork County Council | |
|----------|-------------------------------------------|--|
| Address: | Northern Division | |
| | Annabella | |
| | Mallow | |
| | Co. Cork | |
| Tel: | 022 21123 | |
| Fax: | 022 21983 np ⁰ in ⁰ | |
| e-mail: | Frank.cronin@corkcoco.je | |

*This should be the name of the water services authority in whose ownership or control the waster 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.

S

| Name*: | Frank Cronin 🔬 |
|----------|--------------------------|
| Address: | Northern Division |
| | Annabella |
| | Mallow |
| | Co. Cork |
| Tel: | 022 21123 |
| Fax: | 022 21983 |
| e-mail: | Frank.cronin@corkcoco.ie |

*This should be the name of person nominated by the water services authority for the purposes of the application.

Co-Applicant's Details

| Name*: | Not Applicable |
|--------------|----------------------------------|
| Address: | Not Applicable |
| | |
| Tel: | Not Applicable |
| Tel: Fax: | Not Applicable Not Applicable |

*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 (authorisation) licence application.

Design, Build & Operate Contractor Details

| Name*: | Not Applicable | |
|-----------------|-----------------------------------------------------------------------------|--|
| Address: | Not Applicable | |
| 8. | | |
| 100 BB 1000 B | | |
| Tel: | Not Applicable | |
| Fax: | Not Applicable | |
| e-mail: | Not Applicable | |
| *Where a decign | build & operate contract is in place for the waste water works, or any part | |

Where a design, build & operate contract is in place for the waste water works, or any part thereof, the details of the contractor should be provided.

Attachment B.1 should contain appropriately scaled drawings / maps (≤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 |
|---------------------|--------------|----------|
| | other | <u>«</u> |
| | and and or a | |

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.

28,0

| Name*: | Flannan Groarke of state |
|-------------------|-----------------------------|
| Address: | Cork County Council |
| | Annabella 🔊 |
| | Mallow const |
| | Co. Cork |
| Grid ref | 192575E |
| (6E, 6N) | 193434N |
| Level of | Secondary |
| Treatment | ÷ |
| Primary | 025-31666 |
| Telephone: | |
| Fax: | 025-32331 |
| e-mail: | Flannan.Groarke@corkcoco.ie |

*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 georeferenced 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 |
|---------------------|-----|----|
| | 1 | |

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.

| Type of Discharge | Point discharge- 200mm diameter outfall pipe - Open Pipe outfall. |
|----------------------|-------------------------------------------------------------------|
| Unique Point Code | SW01-CONNA |
| Location | River Bride, adjacent to WWTP |
| Grid ref (6E, 6N) | 192689E, 93500N |

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.

| Ves | No |
|----------------|------------|
| 14. 15 other V | |
| | N' MY OFFE |

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.

| Type of | Not Applicable | 4 4 |
|------------|-------------------------------------------------|--------|
| Discharge | Colfe | |
| Unique | Not Applicable | |
| Point Code | | |
| Location | Not Applicable | |
| Grid ref | Not Applicable | |
| (6E, 6N) | 2 Revealed a Scoresson and Scoresson and Scores | |

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 |
|---------------------|-----|----|
| | | V |

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.

| Type of | 100mm diameter outfall pipe from forward feeding pump sump. |
|------------|-------------------------------------------------------------|
| Discharge | |
| Unique | SW02-GLAN |
| Point Code | |
| Location | River Bride, adjacent to WWTP |
| Grid ref | 192673, 93491N |
| (6E, 6N) | , |

Attachment B.5 should contain appropriately scaled drawings / maps (≤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 | only and Yes | No |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| | outositied t | 1 |
| B.6 Planning Authority | Spectron terre | |
| ړه ډر | instation of the second s | |

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.

| Name: | Cork County Council |
|----------|-------------------------|
| Address: | Planning Department |
| | County Hall |
| | Carriagrohane Road |
| | Cork |
| Tel: | 021 4276891 |
| Fax: | 021 4867007 |
| e-mail: | Planninginfo@corkcoc.ie |

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

| has been obtained | 1 | is being processed | |
|------------------------|---|--------------------|--|
| is not yet applied for | | is not required | |

| Local Authority Planning File Reference Nº: | Not Available |
|---------------------------------------------|---------------|
| M. Comparison and C. L. Download Press. | |

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.

| Yes | No |
|-----|--------------|
| | \checkmark |
| | Yes |

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.

| Yes | No |
|-----|-----|
| | V |
| | Yes |

B.7 (ii) Health Services Executive Region

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

| Health Service Executive N 200 |
|--------------------------------|
| North Cork Area Headquarters |
| Gouldhill |
| Mallow, Co. Cork |
| 022 30200 800 |
| 022 30211 e st |
| Gerry.oconnell@hse.ie |
| |

B.7 (iii) Other Relevant Water Services Authorities

Regulation 13 of the Waste Water Discharge (Authorisation) Regulations, 2007 requires all applicants, not being the water services authority in whose functional area the relevant waste water discharge or discharges, to which the relevant application relates, takes place or is to take place, to notify the relevant water services authority of the said application.

| Name: | Not Applicable | |
|----------|----------------|--|
| Address: | Not Applicable | |
| Tel: | Not Applicable | |
| Fax: | Not Applicable | |
| e-mail: | Not Applicable | |

| Relevant Authority Notified | Yes | No |
|------------------------------------|-----|----|
| | | 1 |

Attachment B.7(iii) should contain a copy of the notice issued to the relevant local authority.

| Attachment included | Yes | No |
|---------------------|-----|----|
| e a sederar a s | | V |

B.8 Notices and Advertisements

Regulations 10 and 11 of the Waste Water Discharge (Authorisation) Regulations, 2007 require all applicants to advertise the application in a newspaper and by way of a site notice. See *Guidance Note*.

Attachment B.8 should contain a copy of the site notice and an appropriately scaled drawing (\leq A3) showing its location. The original application must include the original page of the newspaper in which the advertisement was placed. The relevant page of the newspaper containing the advertisement should be included with the original and two copies of the application.

| Attachment included | Yes | No |
|---------------------|-----|----|
| | te. | |
| | | |

B.9 (i) Population Equivalent of Agglomeration

TABLE B.9.1 POPULATION EQUIVALENT OF AGGLOMERATION

The population equivalent (p.e.) of the applomeration 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.

| Population Equivalent | 800 |
|------------------------|--------------------------------------------------------------------|
| Data Compiled (Year) 🔗 | 2008/2009 |
| Method | Building count & review of planning applications granted. |

B.9 (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,

| Description | No. of Units | PE/unit | PE | |
|-----------------------------------------------------|--------------|---------|-----|--|
| Planning granted, not contributing - Domestic | 100 | 2.8 | 280 | |
| | | Total | 280 | |

- 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 water habitat.

Current PE served contributing to the WWTP is circa 510PE

Additional planned contribution to the plant will not exceed the 800PE plant limitation.

B.9 (iii) FEES

State the relevant Class of waste water discharge as per Column 1 of the Second Schedule, 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 €) | 1 |
|-----------------------------------------------------------------------------|------------|---|
| Discharges from agglomerations with a population equivalent of 500-1,000 | €10000 | |

| Appropriate Fee Included | otheYes | No |
|--------------------------|-------------|----|
| | OTHY BIRS V | |

B.10 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), 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.

Attachment B.10 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.

Works in relation to Conna WWTP or sewerage scheme has not been included in the most recent national Water Services Investment Programme (2007-2009).

| Attachment included | Yes | No |
|-------------------------------------------------|-----|---------------------------------------|
| enner og en | V | i i i i i i i i i i i i i i i i i i i |

B.11 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.

Cork County Council has not registered any Section 63 notices from the Environmental Protection Agency in relation to these waste water works.

Attachment B.11 should contain a summary of any relevant correspondence issued in relation to a Section 63 notice.

| Attachment included | Yes | No |
|---------------------|-----|----|
| | | V |

B.12 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.12 should contain the most recent licence issued under the Forsehore 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 √ |
|---------------------|-----|---------|
| | ¢.• | |

SECTION C: INFRASTRUCTURE & OPERATION

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.

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.

Criteria for assessment of existing Storm water tank

 Causes a significant visual or aesthetic impact and public complaints Not deemed to have any significant visual or aesthetic impact. No Public complaints logged in with Cork County Council

- 2) Causes deterioration in water quality in receiving waters
- 3) Gives rise to failure in meeting the requirements of national regulations on foot of EU Directives.
- 4) Operates in Dry Weather.

A pre-existing septic tank was refurbished during the WWTP installation and is currently been used as a forward feeding pump sump/storm water holding tank. There is no available data to the capacity of pump sump. There is no available flow data or records of flows from the storm water overflow. A visual inspection indicates that the influent levels have not reached the invert of the storm overflow for some time.

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. There are not Pumps stations in the network.

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 |
|---------------------|-----|----|
| | 1 | |

C.2 Outfall Design and Construction

Provide details on the primary discharge point & secondary discharge points and storm overflows to include reference, location, design criteria and construction detail.

The main discharge point, SW01-CONNA, is the main outlet from Conna WWTP. The outfall is located North of the WWTP compound and discharges directly to the River Bride. The point of discharge is an open pipe above the water level of the river. There is no headwall construction in place.

Emergency storm water overflow, SW02-CONNA, discharges at point adjacent to the main discharge point. There is no headwall construction in place.

Attachment C.2 should contain any supporting documentation on the design and construction of <u>any and all</u> discharge outfalls, including stormwater overflows, from the waste water works.

| Yes | No |
|-----|-----|
| | 1 |
| | Yes |

reversed that isolate of the starte overflow for some dime.

Consent for inspection purposes only any other use.

DISCHARGES TO THE AQUATIC SECTION D: 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 emissions are made or are to be made.

Details of all discharges of waste water from the agglomeration should submitted via the following web based link: he http://78.137.160.73/epa wwd licensing/. The applicant should address in particular all discharge points where the substances outlined in Tables D.1(i), (b) & (c) and D.1(ii), (b) & (c) of Annex 1 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 Purposes ed applicant shall screen the discharge for the relevant substance.

Discharges to Surface Waters D.1

Details of all discharges of wastes water from the agglomeration should be supplied via the **S** following web based link: http://78.137.160.73/epa wwd licensing/. Tables D.1(i)(a), (b) & (c), should be completed for the primary discharge point from the agglomeration and Tables D.1(ii)(a), (b) & (c) should be completed for each secondary discharge point, where relevant. Table DA(iii)(a) 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 plant this data should also be provided in response to Section D.1.

Supporting information should form Attachment D.1

| Attachment included | Yes | No |
|---------------------|-----|----|
| | V | ь. |

D.2 Tabular Data on Discharge Points

Applicants should submit the following information for each discharge point:

Table D.2:

| PT_CD | PT_TYP E | LA_NAME | RWB_TYPE | RWB_NAME | DESIGNATION | EASTING | NORTHING |
|-------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------|
| Point Code Provide label ID's | Point Type (e.g., Primary/ Secondar y/ 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 |
| SW01- CONNA | Primary | Cork County Council | River | Bride River | None | 192689E | 093500E |
| SW02- CONNA | Storm water overflow | Cork County Council | River | Bride River | None | 192676N | 93491N |

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 other EPA website at 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.

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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 E.1(i) via the following web based link: <u>http://78.137.160.73/epa_wwd_licensing/</u>.

Refer to 'epa wwd licensing' web page print off attached.

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 E.1(ii) via the following web based link: <u>http://78.137.160.73/epa_wwd_licensing/</u>.

There is not available data to estimate the quantity of discharge from the storm water overflow.

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 meters.

5

There is no Composite sampler on site.

There is an outlet flow flume but the level sensor is not operational.

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 emission and its effect on the receiving environment should be considered.

Cork County Council Water Services Laboratories sample and monitor in accordance with 'Sampling Methods for examination of water and wastewater' 18th edition 1992. Sampling is carried out on a Bi-annual basis.

Details of any accreditation or certification of analysis should be included. **Attachment E.2** should contain any supporting information.

| Attachment included | Yes | No |
|---------------------|-----|----|
| | V | |

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 |
| SW01 | Primary | Sampling | 192689E | 093500N | N |
| aSW01u | u/s | Sampling | 192503E | 093447N | N |
| aSW01d | d/s | Sampling | 193054E | 093642N | N |

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. 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. Forin

E.4 **Sampling Data**

Regulation 16(1)(h) of the Waste Water Discharge (Authorisation) Regulations 2007 requires all applicants in the case of an existing waste water treatment plant to specify the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application.

Regulation 16(1)(I) of the regulations 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 |
|---------------------|-----|----|
| | 1 | |

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

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

Detailed 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).

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 crossreferences to the relevant sections in the EIS.**

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

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

The monitoring results at the discharge point (attachment E4) indicate that the plant is operating well within the requirements of the Urban Waste Water Treatment regulations in general. The Plant has exceeded the UWWT Regs on a number of occasions which seem to coincide with heavy rainfall events.

Emissions on Receiving Waters

Assimilative capacity assessment based on the dilution model is shown in the following table.

Assimilative Capacity of the Receiving water

| | 0.76 | m^3/s |
|---|-------|---------|
| | 5.17 | m^3/s |
| ſ | 0.001 | m^3/s |

95% tile flow of River Median Flow average volume of discharge

| | | Total Phosphate | Ortho Phosphate | BOD ₅ | SS | Total Nitrogen | Sul pha te | Ammo nia-N |
|------------------------|------|--------------------|--------------------|------------------|--------|-------------------|------------------|---------------|
| Median in River | mg/l | 0.103 | 0.041 | 1.125 | 5.950 | 3.925 | <30 | 0.075 |
| Median in Discharge | mg/l | 4.220 | 2.830 | 32.800 | 21.350 | 13.080 | <30 | 7.800 |
| C _{final} | mg/l | 0.108 | 0.045 | 1.167 | 5.970 | 3.937 | <30 | 0.085 |

Increase

in River mg/l 0.005 0.004 0.042 0.020 0.012 <30 0.010 Note: * Figures based on average of CCCN monitoring as per attachment E4

Assimilative Capacity Calculations were not performed for the following parameters, as the substances were below the limit of detection in the upstream samples, in the discharge samples and in the downstream samples:

(Chromium, Copper, Lead, Nickel, Cadmium, Barium, Boron, Zinc, Fluoride)

Details of all monitoring of the receiving water should be supplied via the following web based link: <u>http://78.137.160.73/epa_wwd_licensing/</u>. Tables F.1(i)(a) & (b) should be completed for the primary discharge point. Surface water monitoring locations upstream and downstream of the discharge point shall be screened for those substances listed in Tables F.1(i)(a) & (b). Monitoring of surface water shall be carried out at not less than two points, one upstream from the discharge location and one downstream.

Refer to 'epa wwd licensing' web page print off attached.

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

Not applicable, there are no secondary discharges from the works

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

Not applicable, there are no ground emissions from the works.

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

| Sampling Location | EPA Biologica | al Quality Rating | g (Q values) |
|-------------------|---------------|-------------------|--------------|
| | 1995 - 1997 | 2001 - 2003 | Target |
| Br. at Conna | 4 | 4 | 4 |
| Mogelly Br. | 4 | 4 | 4 |

Shellfish Regulations
S.I.200:1994;Not designated.Bathing Water Regulations S.I.
178:1998Not designatedSalmonid Water Regulations
S.I. 293: 1998Designated.Special Area of Conservation
(SAC)Designated, Site code 002170
The site synopsis can be found @

http://www.npws.ie/en/media/Media,4178,en.pdf

http://www.npws.ie/en/media/Media,4178,en.pdf

Special Protection Area (SPA); Not Designated, however the Blackwater estuary is designated.

Sensitive Area (Urban Waste Not designated water Treatment Regulations S.I.254:2001)

The River Blackwater is included in the draft Management Plan for the South Western River Basin District (Dec 2008). This can be downloaded at the following address;

http://www.swrbd.ie/downloads/Web/South%20Western%20RBD%20RMBP.pdf.

 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 evidence to suggest that there are sources within the agglomeration or in the discharge itself which would lead to emissions of the main polluting substances (as defined in the dangerous substances Regulations SI 12:2001) at levels which would likely to impair the environment.

 In circumstances where water abstraction points exist downstream 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.

There are no downstream water abstraction points.

- 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) —
 - 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,
 - 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,

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- (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/EEC¹ in accordance with the procedures laid down in Article 21 of that Directive,
- (c) a special area of conservation within the meaning of the Natural Habitats Regulations, or
- (d) an area classified pursuant to Article 4(1) or 4(2) of Council Directive 79/409/EEC²;

¹Council 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)

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

The development is in the surface water catchment of the River Blackwater, SAC 002170. In accordance with EPA Circular L8/08 Appendix 1, the project must be screened for its impacts. However, due to financial constraints, Cork County Council does not have the resources for the foreseeable future to assess the impacts in accordance with the EPA document, 'Waste Water discharge Licence – Appropriate Assessment'.

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

Not applicable.

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

There is no modelling of the sewer network to date.

| Attachment included | Yes | No |
|---------------------|-----|--------------|
| | | \checkmark |

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 ³ /day | Point Code Provide Iabel 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. 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.

There are no drinking water abstraction points downstream/down-gradient of the discharge point.

Attachment F.2 should contain any supporting information.

| Attachment included | Yes | No |
|---------------------|-----|----|
| | | 7 |

Consent of copyright owner required for any other use.

SECTION G: PROGRAMMES OF IMPROVEMENTS

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;

- Dangerous Substances Directive 2006/11/EC,
- Water Framework Directive 2000/60/EC,
- Birds Directive 79/409/EEC,
- Groundwater Directives 80/68/EEC & 2006/118/EC,
- Drinking Water Directives 80/778/EEC,
- Urban Waste Water Treatment Directive 91/271/EEC,
- Habitats Directive 92/43/EEC,
- Environmental Liabilities Directive 2004/35/EC,
- Bathing Water Directive 76/160/EEC, and
- Shellfish Waters Directive (79/923/EEC).

There is currently no programme of improvements for the treatment plant.

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 | For yies | Yes | No |
|---------------------|----------|-----|----|
| | -xofcor | | Х |

G.2 Compliance with Water Quality Standards for Phosphorus Regulations (S.I. No. 258 of 1998).

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 Water Quality Standards for Phosphorous Regulations (S.I. No. 258 of 1998) 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 identified as the principal sources of pollution under the P regulations.

There is currently no programme of improvements for the treatment plant. **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 |
|---------------------|-----|----|
| | | Х |

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.

There are no planned works for upgrading the existing plant.

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 |
|---------------------|-----|----|
| | | X |
| | | |

G.4 Storm Water Overflow

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.

There are no planned works for upgrading the existing plant.

Con

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.

N. 8

oth

| Attachment included | Dectrowne | Yes | No |
|---------------------|-----------|-----|----|
| | FOINSEN | | х |

SECTION H: DECLARATION

Declaration

I hereby make application for a waste water discharge licence/revised licence, 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.

Date : Signed by : (on behalf of the organisat Print signature name: Position in organisation: Con

SECTION I: JOINT DECLARATION

Joint Declaration Note1

I hereby make application for a waste water discharge licence/revised licence, 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 | et use. | |
|------------------------------------------------|-------------------------|-----|
| Signed by :(on behalf of the organisation) | o ^{the} Date : | |
| Print signature name: | | |
| Lead Authority Signed by : | ¥ | |
| <u>Co-Applicants</u> | | |
| Signed by : (on behalf of the organisation) | Date : | |
| Print signature name: | | |
| Position in organisation: | | |
| Signed by : (on behalf of the organisation) | Date : | , |
| Print signature name: | | |
| Position in organisation: | | 100 |
| | | |

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.

Agglomeration details

| Leading Local Authority | Cork County Council |
|---------------------------------------------------|-------------------------------------|
| Co-Applicants | |
| Agglomeration | Conna |
| Population Equivalent | 990 |
| Level of Treatment | Secondary |
| Treatment plant address | Conna Village Fermoy Co. Cork |
| Grid Ref (12 digits, 6E, 6N) EPA Reference No: | 192575 / 093434 |

Contact details

| Contact Name: | Frank Cronin |
|------------------|-------------------------------------------------------------------------------------|
| Contact Address: | Water Services Section Cork County Council Je ^{se} Northern Division |
| | Northern Division |
| | Mallow could and |
| | Co Cork |
| Contact Number: | 022-21123 |
| Contact Fax: | 022 21983 |
| Contact Email: | frankeronin@corkcoco.ie |
| Conser | to optimite connections |

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

Discharge Point Code: SW-1

| Local Authority Ref No: | SW1-CONNA |
|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Source of Emission: | Conna WWTP |
| Location: | Conna Village, Fermoy, Co, Cork |
| Grid Ref (12 digits, 6E, 6N) | 192650 / 093475 |
| Name of Receiving waters: | River Bride |
| Water Body: | River Water Body |
| River Basin District | South Western RBD |
| Designation of Receiving Waters: | SAC Code 002170 |
| Flow Rate in Receiving Waters: | 0.47 m ³ .sec ⁻¹ Dry Weather Flow |
| | 0.9 m ³ .sec ⁻¹ 95% Weather Flow |
| Additional Comments (e.g. commentary on zero flow or other information deemed of value) | |

Emission Details:

| | | | A USC. | | |
|----------------------|----------------------------|-----------------------------|-----------|-----------|------------|
| (i) Volume emitted | | | other | | |
| Normal/day | 100 m ³ | Maximum/dayon and | 144 m³ | | |
| Maximum rate/hour | 6 m ³ | Period of emission (avg) | 60 min/hr | 24 hr/day | 365 day/yr |
| Dry Weather Flow | 0.0017 m ³ /sec | ection wher | | | |
| | Conser | For instruction | | | |

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

Discharge Point Code: SW-1

| Substance | | As discharged | | | | | | |
|----------------------------------|------------------------|-----------------|----------------|--------|--|--|--|--|
| | Unit of Measurement | Sampling Method | Max Daily Avg. | kg/day | | | | |
| рН | рН | 24 hr composite | = 9 | | | | | |
| Temperature | °C | 24 hr composite | = 30 | | | | | |
| Electrical Conductivity (@ 25°C) | µS/cm | 24 hr composite | = 1000 | | | | | |
| Suspended Solids | mg/l | 24 hr composite | = 35 | | | | | |
| Ammonia (as N) | mg/l | 24 hr composite | = 0 | 0 | | | | |
| Biochemical Oxygen Demand | mg/l | 24 hr composite | = 25 | | | | | |
| Chemical Oxygen Demand | mg/l | 24 hr composite | = 125 | | | | | |
| Total Nitrogen (as N) | mg/l | 24 hr composite | = 35 | | | | | |
| Nitrite (as N) | mg/l | 24 hr composite | = 0 | 0 | | | | |
| Nitrate (as N) | mg/l | 24 hr composite | = 0 | 0 | | | | |
| Total Phosphorous (as P) | mg/l | 24 hr composite | = 8 | | | | | |
| OrthoPhosphate (as P) | mg/l | 24 hr composite | = 6 | | | | | |
| Sulphate (SO4) | mg/l | 24 hr composite | = 0 | 0 | | | | |
| Phenols (Sum) | µg/l | 24 hr composite | = 0 | 0 | | | | |

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45µm filter paper For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45µn For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent. of the same tor phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent. of the same tor phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent. of the same tor phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent. of the same provide the same to th

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

Discharge Point Code: SW-1

| Substance | | ļ į | As discharged | |
|-----------------|------------------------|-----------------|----------------------|--------|
| | Unit of Measurement | Sampling Method | Max Daily Avg. | kg/day |
| Atrazine | μg/l | 24 hr composite | = 0 | 0 |
| Dichloromethane | μg/l | 24 hr composite | = 0 | 0 |
| Simazine | μg/l | 24 hr composite | = 0 | 0 |
| Toluene | μg/l | 24 hr composite | = 0 | 0 |
| Tributyltin | µg/l | 24 hr composite | = 0 | 0 |
| Xylenes | µg/l | 24 hr composite | = 0 | 0 |
| Arsenic | µg/l | 24 hr composite | = 0 | 0 |
| Chromium | µg/l | 24 hr composite | = 0 | 0 |
| Copper | µg/l | 24 hr composite | = 0 | 0 |
| Cyanide | µg/l | 24 hr composite | = 0 | 0 |
| Flouride | µg/l | 24 hr composite | = 0 | 0 |
| Lead | µg/l | 24 hr composite | = 0 | 0 |
| Nickel | µg/l | 24 hr composite | = 0 | 0 |
| Zinc | µg/l | 24 hr composite | = 0 | 0 |
| Boron | µg/l | 24 hr composite | <u>,</u> <u></u> € 0 | 0 |
| Cadmium | µg/l | 24 hr composite | = 0 | 0 |
| Mercury | µg/l | 24 hr composite | = 0 | 0 |
| Selenium | μg/l | 24 hr composite | = 0 | 0 |
| Barium | | O.4 Kernerative | = 0 | 0 |
| | | DI PUTCOUIT | | |

For Orthophosphate: this monitoring should be undertaken on a sample thered on 0.45µm filter paper For Phenols: USEPA Method 604, AWWA Standard Method 6246 Brequivalent. TABLE E.1(i): WASTE WATER FREQUENCY AND QUANTITY OF DISCHARGE – Primary and Secondary Discharge Points

| Identification Code for Discharge point | | Quantity of Waste Water Discharged (m ³ /annum) |
|-----------------------------------------|-----|------------------------------------------------------------|
| SW-1 | 365 | 36500 |

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

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

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

Primary Discharge Point

| Discharge Point Code: | SW-1 |
|------------------------------|-----------------|
| MONITORING POINT CODE: | aSW-1d |
| Grid Ref (12 digits, 6E, 6N) | 193054 / 093642 |

| Parameter | | Resul | ts (mg/l) | Sampling method | Limit of Quantitation | Analysis method / technique | |
|-------------------------------------|----------|-----------|-----------|-------------------------------------------|--------------------------|-----------------------------------|--------------------------|
| | 23/10/08 | 01/01/09 | 28/01/09 | 05/03/09 | | | |
| рН | | | = 7.6 | = 7.3 | Grab | 2 | Electrochemic al |
| Temperature | | = 0 | | | Grab | 0.5 | Electrochemic al |
| Electrical Conductivity (@ 25°C) | | | = 242 | = 278 | Grab | 0.5 | Electrochemic al |
| Suspended Solids | | | = 5 | = 7 | Grab | 0.5 | Gravimetric |
| Ammonia (as N) | | | < 0.1 | = 0.1 | Grab | 0.02 | Colorimetric |
| Biochemical Oxygen Demand | | | = 2 | = 2 | Grab | 0.06 | Electrochemic al |
| Chemical Oxygen Demand | | | = 24 | < 5 | Grab | 8 | Digestion & Colorimetric |
| Dissolved Oxygen | | = 0 | | ther | Grab | 0 | ISE |
| Hardness (as CaCO₃) | | = 0 | | the the | Grab | 0 | Titrimetric |
| Total Nitrogen (as N) | | | = 5.3 | 13 ¹ -01 ³ ₹04.8 | Grab | 0.5 | Digestion & Colorimetric |
| Nitrite (as N) | | | = 0.00849 | | Grab | 0.013 | Colorimetric |
| Nitrate (as N) | | | = 5.49 | | Grab | 0.04 | Colorimetric |
| Total Phosphorous (as P) | | | FCO. 2WIL | = 0.07 | Grab | 0.2 | Digestion & Colorimetric |
| OrthoPhosphate (as P) | = 0.1 | For | 0.05 | = 0.06 | Grab | 0.02 | Colorimetric |
| Sulphate (SO4) | | .01 | < 30 | | Grab | 30 | Turbidimetric |
| Phenols (Sum) | | Consertor | < 0.1 | | Grab | 0.1 | GC-MS2 |

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45µm filter paper For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

Additional Comments: 01/01/09 and 0 used as default values where results are not available

| Parameter | | Sar met | Sampling method | Limit of Quantitation | Analysis method / technique | |
|-------------------------------------|----------|------------|--------------------|--------------------------|-----------------------------------|--------------------------|
| | 02/04/09 | 17/04/09 | | | | |
| рН | = 7.5 | = 7.7 | Gra | ıb | 2 | Electrochemic al |
| Temperature | | | Gra | ıb | 0.5 | Electrochemic al |
| Electrical Conductivity (@ 25°C) | = 257 | = 258 | Gra | b | 0.5 | Electrochemic al |
| Suspended Solids | = 11 | = 5.2 | Gra | ıb | 0.5 | Gravimetric |
| Ammonia (as N) | = 0.16 | = 0.06 | Gra | ıb | 0.02 | Colorimetric |
| Biochemical Oxygen Demand | = 2 | = 2 | Gra | b | 0.06 | Electrochemic al |
| Chemical Oxygen Demand | = 18 | = 14 | Gra | ıb | 8 | Digestion & Colorimetric |
| Dissolved Oxygen | | | Gra | ıb | 0 | ISE |
| Hardness (as CaCO₃) | | | Gra | ıb | 0 | Titrimetric |
| Total Nitrogen (as N) | = 3 | = 3 | Gra | b | 0.5 | Digestion & Colorimetric |
| Nitrite (as N) | | | Gra | ıb | 0.013 | Colorimetric |
| Nitrate (as N) | | | Gra | ıb | 0.04 | Colorimetric |
| Total Phosphorous (as P) | = 0.11 | = 0.13 | Gra | ıb | 0.2 | Digestion & Colorimetric |
| OrthoPhosphate (as P) | = 0.07 | = 0.1 | Gra | ıb | 0.02 | Colorimetric |
| Sulphate (SO4) | | | Gra | ıb | 30 | Turbidimetric |
| Phenols (Sum) | | | Gra | ıb | 0.1 | GC-MS2 |

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45 m filter paper For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent of the same set o

Additional Comments: 01/01/09 and 0 used as default values where results are not available

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

Primary Discharge Point

| Discharge Point Code: | SW-1 |
|------------------------------|-----------------|
| MONITORING POINT CODE: | aSW-1d |
| Grid Ref (12 digits, 6E, 6N) | 193054 / 093642 |

| Parameter | | Sampling method | Limit of Quantitation | Analysis method / technique | | | |
|-----------------|----------|--------------------|--------------------------|-----------------------------------------|------|------|--------------|
| | 01/01/09 | 28/01/09 | 05/02/09 | 05/03/09 | | | |
| Atrazine | | < 0.01 | | | Grab | 0.96 | HPLC |
| Dichloromethane | | < 1 | | | Grab | 1 | GC-MS1 |
| Simazine | | < 0.01 | | | Grab | 0.01 | HPLC |
| Toluene | | < 1 | | | Grab | 0.02 | GC-MS1 |
| Tributyltin | = 0 | | | | Grab | 0.02 | GC-MS1 |
| Xylenes | | < 1 | | | Grab | 1 | GC-MS1 |
| Arsenic | | < 0.96 | | | Grab | 0.96 | ICP-MS |
| Chromium | | < 20 | < 20 | < 20 | Grab | 20 | ICP-OES |
| Copper | | < 20 | < 20 | < 20 | Grab | 20 | ICP-OES |
| Cyanide | | < 5 | | 15 ⁰ . | Grab | 5 | Colorimetric |
| Flouride | | = 30 | | < 20 0 00000000000000000000000000000000 | Grab | 100 | ISE |
| Lead | | < 20 | < 20 | < 20 0 ¹¹ | Grab | 20 | ICP-OES |
| Nickel | | < 20 | < 20 | 20 | Grab | 20 | ICP-OES |
| Zinc | | < 20 | ج 20 ج | 20 | Grab | 20 | ICP-OES |
| Boron | | < 20 | < 20 1119 11 | < 20 | Grab | 20 | ICP-OES |
| Cadmium | | < 20 | < 2051 25 1004 | < 20 | Grab | 20 | ICP-OES |
| Mercury | | < 0.2 | < 20 < 20 | | Grab | 0.2 | ICP-MS |
| Selenium | | = 1.3 | in old | | Grab | 0.74 | ICP-MS |
| Barium | | = 47 😵 | < 20 | = 57.6 | Grab | 20 | ICP-OES |

Additional Comments:

TBT value is 0.02ug/l as sn TBT testing not required

| Parameter | | Results (µg/l) | Sampling method | Limit of Quantitation | Analysis method / technique |
|-----------------|----------|----------------|--------------------|--------------------------|-----------------------------------|
| | 02/04/09 | 17/04/09 | | | |
| Atrazine | | | Grab | 0.96 | HPLC |
| Dichloromethane | | | Grab | 1 | GC-MS1 |
| Simazine | | | Grab | 0.01 | HPLC |
| Toluene | | | Grab | 0.02 | GC-MS1 |
| Tributyltin | | | Grab | 0.02 | GC-MS1 |
| Xylenes | | | Grab | 1 | GC-MS1 |
| Arsenic | | | Grab | 0.96 | ICP-MS |
| Chromium | < 20 | < 20 | Grab | 20 | ICP-OES |
| Copper | < 20 | < 20 | Grab | 20 | ICP-OES |
| Cyanide | | | Grab | 5 | Colorimetric |
| Flouride | | | Grab | 100 | ISE |
| Lead | < 20 | < 20 | Grab | 20 | ICP-OES |
| Nickel | < 20 | < 20 | Grab | 20 | ICP-OES |
| Zinc | < 20 | < 20 | Grab | 20 | ICP-OES |
| Boron | < 20 | < 20 | Grab | 20 | ICP-OES |
| Cadmium | < 20 | < 20 | Grab | 20 | ICP-OES |
| Mercury | | | Grab | 0.2 | ICP-MS |
| Selenium | | | Grab | 0.74 | ICP-MS |
| Barium | < 20 | < 20 | Grab | 20 | ICP-OES |

Additional Comments:

TBT value is 0.02ug/l as Sn TBT testing not required

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

Primary Discharge Point

| Discharge Point Code: | SW-1 |
|------------------------------|-----------------|
| MONITORING POINT CODE: | aSW-1u |
| Grid Ref (12 digits, 6E, 6N) | 192503 / 093447 |

| Parameter | | Resul | lts (mg/l) | Sampling method | Limit of Quantitation | Analysis method / technique | |
|-------------------------------------|----------|------------|------------|-----------------|--------------------------|-----------------------------------|--------------------------|
| | 23/10/08 | 01/01/09 | 28/01/09 | 05/03/09 | | | |
| рН | | | = 7.6 | = 7.4 | Grab | 2 | Electrochemic al |
| Temperature | | = 0 | | | Grab | 0.5 | Electrochemic al |
| Electrical Conductivity (@ 25°C) | | | = 236 | = 281 | Grab | 0.5 | Electrochemic al |
| Suspended Solids | | | = 5 | = 5 | Grab | 0.5 | Gravimetric |
| Ammonia (as N) | | | < 0.1 | = 0.1 | Grab | 0.02 | Colorimetric |
| Biochemical Oxygen Demand | | | < 1 | = 2 | Grab | 0.06 | Electrochemic al |
| Chemical Oxygen Demand | | | < 21 | = 11 | Grab | 8 | Digestion & Colorimetric |
| Dissolved Oxygen | | = 0 | | ther | Grab | 0 | ISE |
| Hardness (as CaCO₃) | | = 0 | | to the | Grab | 0 | Titrimetric |
| Total Nitrogen (as N) | | | = 5 | 0 F04.7 | Grab | 0.5 | Digestion & Colorimetric |
| Nitrite (as N) | | | = 0.00757 | , e | Grab | 0.013 | Colorimetric |
| Nitrate (as N) | | | | | Grab | 0.04 | Colorimetric |
| Total Phosphorous (as P) | | | = 5.32 /11 | = 0.07 | Grab | 0.2 | Digestion & Colorimetric |
| OrthoPhosphate (as P) | < 0.05 | FOT | 0.05 | < 0.05 | Grab | 0.02 | Colorimetric |
| Sulphate (SO4) | | کن _ | < 30 | | Grab | 30 | Turbidimetric |
| Phenols (Sum) | | Consent of | < 0.1 | | Grab | 0.1 | GC-MS2 |

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45µm filter paper For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

Additional Comments: 01/01/09 and 0 used as default where results are not available

| Parameter | Results (mg/l) | | | Sampling method | Limit of Quantitation | Analysis method / technique |
|-------------------------------------|----------------|----------|--|-----------------|--------------------------|-----------------------------------|
| | 02/04/09 | 17/04/09 | | | | • |
| рН | = 7.6 | = 7.7 | | Grab | 2 | Electrochemic al |
| Temperature | | | | Grab | 0.5 | Electrochemic al |
| Electrical Conductivity (@ 25°C) | = 255 | = 257 | | Grab | 0.5 | Electrochemic al |
| Suspended Solids | = 9 | = 4.8 | | Grab | 0.5 | Gravimetric |
| Ammonia (as N) | = 0.09 | = 0.06 | | Grab | 0.02 | Colorimetric |
| Biochemical Oxygen Demand | = 2 | = 2 | | Grab | 0.06 | Electrochemic al |
| Chemical Oxygen Demand | = 20 | = 13 | | Grab | 8 | Digestion & Colorimetric |
| Dissolved Oxygen | | | | Grab | 0 | ISE |
| Hardness (as CaCO₃) | | | | Grab | 0 | Titrimetric |
| Total Nitrogen (as N) | = 3 | = 3 | | Grab | 0.5 | Digestion & Colorimetric |
| Nitrite (as N) | | | | Grab | 0.013 | Colorimetric |
| Nitrate (as N) | | | | Grab | 0.04 | Colorimetric |
| Total Phosphorous (as P) | = 0.15 | = 0.09 | | Grab | 0.2 | Digestion & Colorimetric |
| OrthoPhosphate (as P) | = 0.07 | = 0.06 | | Grab | 0.02 | Colorimetric |
| Sulphate (SO4) | | | | Grab | 30 | Turbidimetric |
| Phenols (Sum) | | | | Grab | 0.1 | GC-MS2 |

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45 m filter paper For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent of the same set o

Additional Comments: 01/01/09 and 0 used as default where results are not available

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

Primary Discharge Point

| Discharge Point Code: | SW-1 |
|------------------------------|-----------------|
| MONITORING POINT CODE: | aSW-1u |
| Grid Ref (12 digits, 6E, 6N) | 192503 / 093447 |

| Parameter | | Sampling method | Limit of Quantitation | Analysis method / technique | | | |
|-----------------|----------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|--------------|
| | 01/01/09 | 28/01/09 | 05/02/09 | 05/03/09 | | | |
| Atrazine | | < 0.01 | | | Grab | 0.96 | HPLC |
| Dichloromethane | | < 0.2 | | | Grab | 1 | GC-MS1 |
| Simazine | | < 0.01 | | | Grab | 0.01 | HPLC |
| Toluene | | < 1 | | | Grab | 0.02 | GC-MS1 |
| Tributyltin | = 0 | | | | Grab | 0.02 | GC-MS1 |
| Xylenes | | < 1 | | | Grab | 1 | GC-MS1 |
| Arsenic | | < 0.96 | | | Grab | 0.96 | ICP-MS |
| Chromium | | < 20 | < 20 | < 20 | Grab | 20 | ICP-OES |
| Copper | | < 20 | < 20 | < 20 | Grab | 20 | ICP-OES |
| Cyanide | | < 5 | | the second secon | Grab | 5 | Colorimetric |
| Flouride | | = 30 | | net | Grab | 100 | ISE |
| Lead | | < 20 | < 20 | < 20 Nother 150. | Grab | 20 | ICP-OES |
| Nickel | | < 20 | < 20 | \$ 20 | Grab | 20 | ICP-OES |
| Zinc | | < 20 | < 20 🖉 | 20 | Grab | 20 | ICP-OES |
| Boron | | < 20 | < 20 119 10 | < 20 | Grab | 20 | ICP-OES |
| Cadmium | | < 20 | < 20 < 20 put of the second se | < 20 | Grab | 20 | ICP-OES |
| Mercury | | < 0.2 | Dectawine | | Grab | 0.2 | ICP-MS |
| Selenium | | < 0.01 | in oht | | Grab | 0.74 | ICP-MS |
| Barium | | = 49 😚 | < 20 | = 21.6 | Grab | 20 | ICP-OES |

Additional Comments:

TBT value is 0.02ug/l as sn TBT testing not required

| Parameter | | Results (µg/l) | Sampling method | Limit of Quantitation | Analysis method / technique |
|-----------------|----------|----------------|--------------------|--------------------------|-----------------------------------|
| | 02/04/09 | 17/04/09 | | | |
| Atrazine | | | Grab | 0.96 | HPLC |
| Dichloromethane | | | Grab | 1 | GC-MS1 |
| Simazine | | | Grab | 0.01 | HPLC |
| Toluene | | | Grab | 0.02 | GC-MS1 |
| Tributyltin | | | Grab | 0.02 | GC-MS1 |
| Xylenes | | | Grab | 1 | GC-MS1 |
| Arsenic | | | Grab | 0.96 | ICP-MS |
| Chromium | < 20 | < 20 | Grab | 20 | ICP-OES |
| Copper | < 20 | < 20 | Grab | 20 | ICP-OES |
| Cyanide | | | Grab | 5 | Colorimetric |
| Flouride | | | Grab | 100 | ISE |
| Lead | < 20 | < 20 | Grab | 20 | ICP-OES |
| Nickel | < 20 | < 20 | Grab | 20 | ICP-OES |
| Zinc | < 20 | < 20 | Grab | 20 | ICP-OES |
| Boron | < 20 | < 20 | Grab | 20 | ICP-OES |
| Cadmium | < 20 | < 20 | Grab | 20 | ICP-OES |
| Mercury | | | Grab | 0.2 | ICP-MS |
| Selenium | | | Grab | 0.74 | ICP-MS |
| Barium | < 20 | < 20 | Grab | 20 | ICP-OES |

Additional Comments:

TBT value is 0.02ug/l as Sn TBT testing not required

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Annex 2: Check List For Regulation 16 Compliance

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

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

| | ation 16(1) case of an application for a waste water discharge licence, the application shall - | Attachment Number | Checked by Applicant |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------|
| (a) | give the name, address, telefax number (if any) and telephone number of the applicant (and, if different, of the operator of any treatment plant concerned) and the address to which correspondence relating to the application should be sent and, if the operator is a body corporate, the address of its registered office or principal office, | B .1 | Yes |
| (b) | give the name of the water services authority in whose functional area the relevant waste water discharge takes place or is to take place, if different from that of the applicant, | not applicable | Yes |
| (c) | give the location or postal address (including where appropriate, the name of the townland or townlands) and the National Grid reference of the location of the waste water treatment plant and/or the waste water discharge point or points to which the application relates, | B.2 | Yes |
| (d) | state the population equivalent of the agglomeration to which the application relates, | B.9 | Yes |
| (e) | specify the content and extent of the waste water discharge, the level of treatment provided, if any, and the flow and type of discharge, | C,D | Yes |
| (f) | give details of the receiving water body, including its protected area status, if any, and details of any sensitive areas or protected areas or both in the vicinity of the discharge point or points likely to be affected by the discharge concerned, and for discharges to ground provide details of groundwater protection schemes in place for the receiving water body and all associated hydrogeological and geological assessments related to the receiving water environment in the vicinity of the discharge. | | Yes |
| (g) | identify monitoring and sampling points and indicate proposed arrangements for the monitoring of discharges and, if Regulation 17 does not apply, provide details of the likely environmental consequences of any such discharges, | E.2, E.3 | Yes |
| (h) | in the case of an existing waste water treatment plant, specify the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application, | E.4 | Yes |
| (i) | describe the existing or proposed measures, including emergency procedures, to prevent unintended waste water discharges and to minimise the impact on the environment of any such discharges, | G.3 | Yes |
| (j) | give particulars of the nearest downstream drinking water abstraction point or points to the discharge point or points, | not applicable | Yes |
| (k) | give details, and an assessment of the effects of any existing or proposed emissions on the environment, including any environmental medium other than those into which the emissions are, or are to be made, and of proposed measures to prevent or eliminate or, where that is not practicable, to limit any pollution caused in such discharges, | F.1 | Yes |
| (I) | give detail of compliance with relevant monitoring requirements and treatment standards contained in any applicable Council Directives of Regulations, | E.1, E.4 | Yes |
| (m) | give details of any work necessary to meet relevant effluent discharge standards and a timeframe and schedule for such work. | not applicable | Yes |
| (n) | Any other information as may be stipulated by the Agency. | not applicable | Yes |
| Withou | ation 16(3) It prejudice to Regulation 16 (1) and (2), an application for a licence shall be panied by - | Attachment Number | Checked by Applicant |
| (a) | a copy of the notice of intention to make an application given pursuant to Regulation 9, | B.8 | Yes |
| (b) | where appropriate, a copy of the notice given to a relevant water services authority under Regulation 13, | not applicable | Yes |
| (c) | Such other particulars, drawings, maps, reports and supporting documentation as are necessary to identify and describe, as appropriate - | В | Yes |
| (c) (i) | the point or points, including storm water overflows, from which a discharge or discharges take place or are to take place, and | B.3, B.4, B.5 | Yes |
| (c) (ii) | the point or points at which monitoring and sampling are undertaken or are to be undertaken, | E.3 | Yes |
| (d) | such fee as is appropriate having regard to the provisions of Regulations 38 and 39. | B.9 | Yes |

| An or docur | ation 16(4) ginal application shall be accompanied by 2 copies of it and of all accompanying nents and particulars as required under Regulation 16(3) in hardcopy or in an electronic er format as specified by the Agency. | Attachment Number | Checked by Applicant |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------|
| 1 | An Original Application shall be accompanied by 2 copies of it and of all accompanying documents and particulars as required under regulation 16(3) in hardcopy or in electronic or other format as specified by the agancy. | | Yes |
| For th assoc | ation 16(5) e purpose of paragraph (4), all or part of the 2 copies of the said application and iated documents and particulars may, with the agreement of the Agency, be submitted in actronic or other format specified by the Agency. | Attachment Number | Checked by Applicant |
| 1 | Signed original. | | Yes |
| 2 | 2 hardcopies of application provided or 2 CD versions of application (PDF files) provided. | | Yes |
| 3 | 1 CD of geo-referenced digital files provided. | | Yes |
| Where subject to 200 respe stater | ation 17 e a treatment plant associated with the relevant waste water works is or has been ct to the European Communities (Environmental Impact Assessment) Regulations 1989 01, in addition to compliance with the requirements of Regulation 16, an application in ct of the relevant discharge shall be accompanied by a copy of an environmental impact nent and approval in accordance with the Act of 2000 in respect of the said development hay be submitted in an electronic or other format specified by the Agency | Attachment Number | Checked by Applicant |
| 1 | EIA provided if applicable | not applicable | Yes |
| 2 | 2 hardcopies of EIS provided if applicable. | not applicable | Yes |
| 3 | 2 CD versions of EIS, as PDF files, provided. | not applicable | Yes |

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