



4654/101/YMcM

7th February 2011

Environmental Protection Agency – Headquarters,
Administration, Environmental Licensing Programme,
Office of Climate, Licensing & Resource Use,
P.O. Box 3000,
Johnstown Castle Estate,
Co Wexford

Re: **Notice in accordance with Regulation 25(c)(ii) of the Waste Water Discharge (Authorisation) Regulations 2007**
Bohermeen Agglomeration A0028-01

Dear Sir/ Madam,

Please find below the clarification as requested under your previous correspondence of 28th October 2010.

REGULATION 24 COMPLIANCE REQUIREMENTS

Query No.1. Confirm the design capacity of the waste water treatment plant and the current population equivalent (p.e.) being treated at the plant. Please confirm that the current p.e. included the maximum average weekly loading for the agglomeration having taken account of local festivals, peak holidays seasons, etc.

Clarification No.1 Bohermeen A0028-01

	Design Population Equivalent	Current Population Equivalent
Bohermeen Agglomeration	100	22

The Bohermeen waste water treatment plant caters for domestic dwellings only therefore would not be subject to additional loads associated with local festivals and peak holiday seasons, however the population is based on maximum house capacity.

Query No.2. Provide the name of the receiving water body to which the effluent from the primary discharge point drains. Provide the National Grid References for the location where the drain/unnamed stream enters a significant water body and provide a suitable scaled map to show the primary discharge point, receiving water and associated drainage channels.

Clarification No.1 Bohermeen A0028-01

The effluent from the Bohermeen Primary Discharge point drains into the Clady River at National Grid Reference Point 280.449 264.503. See attached drawing 4654/01/05/07 and revised drawing contents page.

Please find attached the revised non-technical summary for the above agglomeration.

If you have any queries or comments, please do not hesitate to contact this office.

Yours sincerely,



Yvonne McMonagle

For: Jennings O'Donovan & Partners

Encl. /

SECTION A: NON-TECHNICAL SUMMARY

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

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

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

A description of:

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

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

Background

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

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

Sewer Network

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

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

Existing Waste Water Treatment Works

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

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

	Design	Current
Population Equivalent (p.e.)	100	22
Total BOD5	6 kg/d	1.32kg/d
Total Suspended Solids	7 kg/d	1.5kg/d

Total Dry Weather Flow	18 m ³ /day	3.96 m ³ /day
Total peak design flow to be treated (3DWF)	2 m ³ /h	0.5 m ³ /h

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

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

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

Meath County Council carried out a flow and load survey for a 14 day period. The results of this survey indicate an average flow of 18.29m³/day. This equates to a population equivalent of 81 (225 l/h/day). This average flow result is higher than the findings of the house count 4.95m³/day. The flow and load survey result may be higher as a result of storm water, surface water and infiltration.

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

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

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

A detailed description of the treatment plant is summarised below :

Aeration unit

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

The aeration unit of the tank is approximately 4.15m². The depth is 2.5 to 3m.

Settlement unit

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

The settlement unit of the tank is approximately 1.5m². The depth is 2.0 to 2.5m.

Sludge pumping

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

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

Treated Effluent

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

Control system

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

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Comhairle Chontae Na Mí
Meath County Council

BOHERMEEN SEWERAGE SCHEME OUTFALL LICENCE APPLICATION

INSPECTION APPLICATION

4654/OL/05/00

Schedule of Drawings

4654/OL/05/01

Attachment A.1 - Site Location Map

4654/OL/05/02

Attachment B.1 - Agglomeration Outline Plan

4654/OL/05/03

Attachment B.2 - Existing Waste Water Treatment Facilities - Overall Site Plan

4654/OL/05/04

Attachment B.3 - Existing Primary Discharge Point

4654/OL/05/05

Attachment C.1 - Existing Waste Water Treatment Facilities - Layout Plan

4654/OL/05/06

Attachment F.1 - Designation Map

4654/OL/05/07

Attachment B.3-1 - Existing Primary Discharge Point / Receiving Water - Overall Plan


Notes

1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE.
3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES.

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client	MEATH COUNTY COUNCIL		
project	BOHERMEEEN SEWERAGE SCHEME		
stage	WASTE WATER DISCHARGE LICENCE APPLICATION		
title	SCHEDULE OF DRAWINGS		
scales	N/A		
drawn	checked	approved	date
TC	YMG	TMG	Nov. 2009

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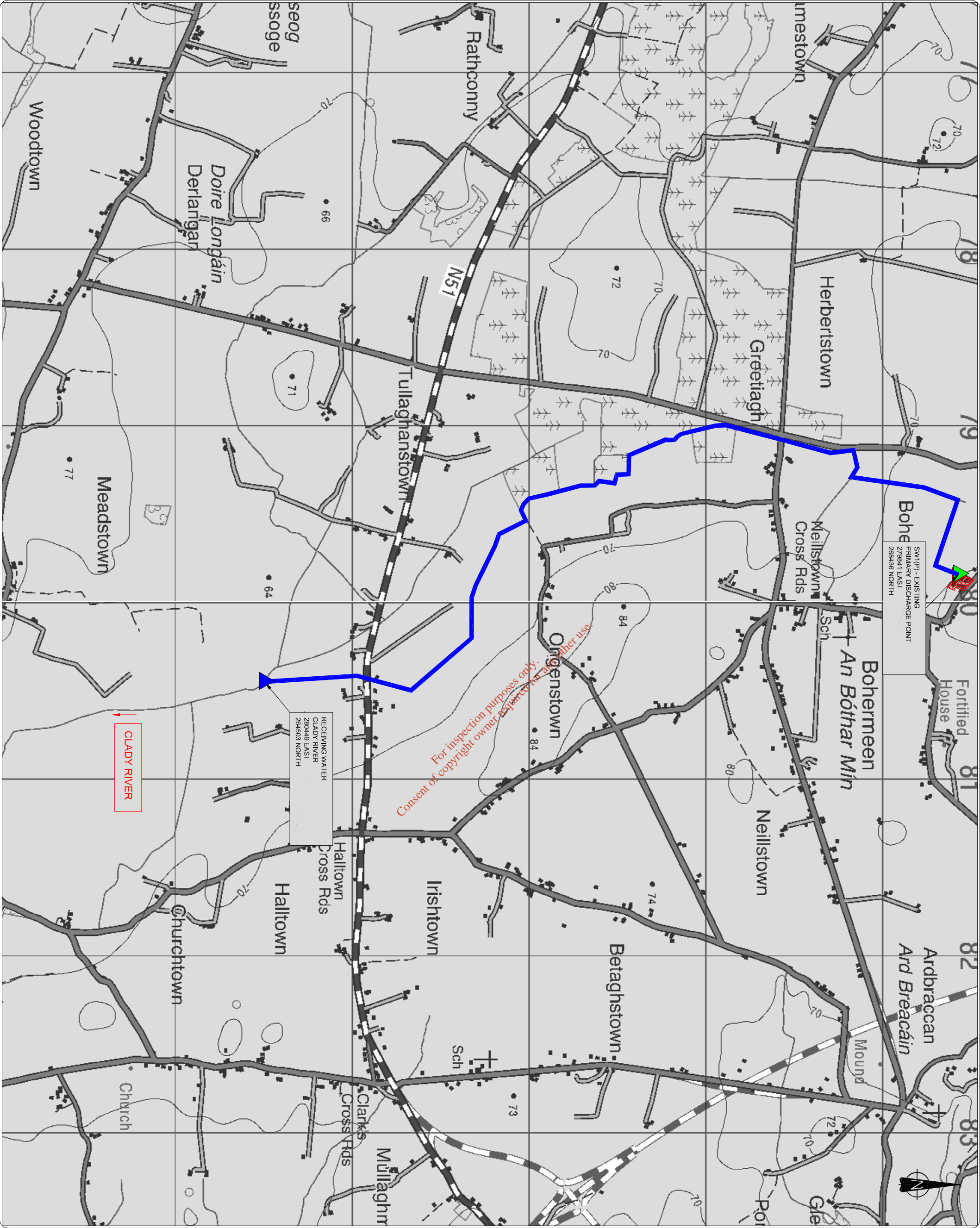


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drawing no. 4654/OL/05/00	revision						
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LEGEND :

-  AGGLOMERATION CATCHMENT AREA
-  EXISTING TREATMENT WORKS
-  EXISTING TREATED EFFLUENT PRIMARY DISCHARGE POINT
-  DRAINAGE CHANNEL TO WHICH THE EFFLUENT FROM THE PRIMARY DISCHARGE POINT DRAINS TO THE MAIN WATER BODY

rev.	modifications	by	date

client			
MEATH COUNTY COUNCIL			
project			
BOHERMEEN SEWERAGE SCHEME			
stage			
WASTE WATER DISCHARGE LICENCE APPLICATION			
title			
ATTACHMENT B.3.1 EXISTING PRIMARY DISCHARGE POINT & RECEIVING WATER BODY OVERALL PLAN			
scales			
1 / 20,000			
drawn	checked	approved	date
TC	YMcG	TMcG	Nov. 2009

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