

For inspection purposes only.
Consent of copyright owner required for any other use.

ATTACHMENT B

NEWSPAPER NOTICE



APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTE WATER DISCHARGE LICENCE

Meath County Council, County Hall, Railway Street Navan, Co. Meath intends to apply to the Environmental Protection Agency for a Waste Water Discharge Licence for an existing discharge at the Wastewater Treatment Plant in the townland of **Durhamstown, Bohermeen** County Meath (National Grid Reference 279,843E 268,436N). The treatment process consists of an activated sludge package treatment unit.

The application relates to the following discharge point:

The primary discharge point PSW1 – 279,841E, 268,436N (Receiving Water – Clady River)

A copy of the following documents shall, as soon as is practicable after receipt by the Agency, be available for inspection or purchase at the headquarters of the Environmental Protection Agency, P.O. Box 3000, Johnstown Castle Estate, Co. Wexford and at Meath County Council, County Hall, Railway Street, Navan, Co. Meath

- (i) the application for a waste water discharge licence
- (ii) such further information relating to the application as may be furnished to the Agency in the course of the Agency's consideration of the application.

Submissions in relation to the application may be made to the Environmental Protection Agency at its headquarters at P.O. Box 3000, Johnstown Castle Estate, Co. Wexford.

Submissions in relation to the application may be made to the Environmental Protection Agency at its headquarters at P.O. Box 3000, Johnstown Castle Estate, Co. Wexford.

For inspection purposes only.
Consent of copyright owner required for any other use.

For inspection purposes only.
Consent of copyright owner required for any other use.

ATTACHMENT D



JENNINGS O'DONOVAN
& PARTNERS
CONSULTING ENGINEERS

Finisklin Business Park
Sligo

T: 071-91 61416 / 071-91 29292
F: 071-91 61080

E: info@jodireland.com
W: www.jodireland.com

4654/122/001/YMcM

12th November 2009

Ms. Mary Boothman,
Development Application Unit,
Department of the Environment,
Dùn Scéine,
Hardcourt Lane,
Dublin 2.

Re: EPA Waste Water Discharge Licence for 16 Villages in County Meath

Dear Mary,

Jennings O'Donovan & Partners are preparing EPA Waste Water Discharge Certificates Applications for Meath sewerage schemes in County Meath listed below:

1. Ardcah Sewerage Scheme (discharge to groundwater)
2. Ballinabrackey Sewerage Scheme (discharges to surface water)
3. Batterstown Sewerage Scheme (discharges to surface water)
4. Bellewstown Sewerage Scheme (discharges to Groundwater)
5. Bohermeen Sewerage Scheme (discharges to surface water)
6. Castletown Sewerage Scheme (discharges to surface water)
7. Clonalvy Sewerage Scheme (discharges to groundwater)
8. Camaross Sewerage Scheme (discharges to groundwater)
9. Cortown Sewerage Scheme (discharges to groundwater)
10. Dunderry Sewerage Scheme (discharges to surface water)
11. Hill of Tara Sewerage Scheme (discharges to groundwater)
12. Kilberry Sewerage Scheme (discharges to surface water)
13. Lloyd, Kells Sewerage Scheme (discharges to surface water)
14. Lobinstown Sewerage Scheme (discharges to surface water)
15. Robinstown Sewerage Scheme (discharges to surface water)
16. Skryne Sewerage Scheme (discharges to surface water)

Please find enclosed site location drawings together with the local designated areas at the sixteen Wastewater Treatment Plants.

Section F of the application relating to the NPWS, requires us to give details of any designation that applies to the receiving water. After consultation with the EPA they advised us to get in contact with you to get a clear picture of the boundary of the SAC and SPA and in addition we require a letter from the NPWS stating whether the discharge is deemed impact the receivers waters or if an "Appropriate Assessment" is to be carried out.

We would be grateful for your input at your earliest convenience as the applications have to be submitted to the EPA by the 22nd of December 2009. If you have any questions regarding the above or wish to discuss the application, please do not hesitate to contact this office.

Yours sincerely,



Yvonne McMonagle
for: Jennings O'Donovan & Partners

Encl.

c.c. Mr. Gerry Boyle, Meath County Council

For inspection purposes only.
Consent of copyright owner required for any other use.

Station No: 1500

River Code: 07B04

Situated On: [BOYNE](#)

Location: Bective Br

Hydrometric Area: Boyne

Chemical Data Available For:



[2001 to 2003](#)

[1998 to 2000](#)

[1995 to 1997](#)

Biological Data:

YEAR	QUALITY
2003	3-4
2000	3-4
1997	3-4
1994	3-4
1990	3-4
1986	4
1981	5
1979	4-5
1974	4-5
1971	5

Close Window

For inspection purposes only.
Consent of copyright owner required for any other use.

AttachmentD.1 RBD_Office

From: Yvonne McMonagle
Sent: 12 November 2009 17:15
To: 'info@erbd.ie'
Subject: Meath Villages Wastewater Certificates License Application

Dear Sir/ Madame,

I am currently completing 16 discharge certificates application for Meath County Council as listed below:

1. Ardcath Sewerage Scheme (discharge to groundwater)
2. Ballinabrackey Sewerage Scheme (discharges to surface water)
3. Batterstown Sewerage Scheme (discharges to surface water)
4. Bellewstown Sewerage Scheme (discharges to Groundwater)
5. Bohermeen Sewerage Scheme (discharges to surface water)
6. Castletown Sewerage Scheme (discharges to surface water)
7. Clonalvy Sewerage Scheme (discharges to groundwater)
8. Carnaross Sewerage Scheme (discharges to groundwater)
9. Cortown Sewerage Scheme (discharges to groundwater)
10. Dunderry Sewerage Scheme (discharges to surface water)
11. Hill of Tara Sewerage Scheme (discharges to groundwater)
12. Kilberry Sewerage Scheme (discharges to surface water)
13. Lloyd, Kells Sewerage Scheme (discharges to surface water)
14. Lobinstown Sewerage Scheme (discharges to surface water)
15. Robinstown Sewerage Scheme (discharges to surface water)
16. Skryne Sewerage Scheme (discharges to surface water)

A specification of the license application is to get in contact with the local RBD office about the need to monitor certain substances listed in Annex X and XIII of the water Framework Directive in the receiving waters. Please find attached the associated drawings showing the location of the waste water treatment plants and discharge points.

The section of the application which relates to the monitoring of the substances listed in Annex 8 and 10 are in section D. After consultation with the EPA they advised us to get in contact with yourselves and to see if any of these 69 substances are present in this receiving water and if there is a need for us to monitor some of these parameters. We also require a letter from yourselves to confirm your findings.

According to the EPA they have been in contact with yourselves about this issue and that you will be aware what is needed for the application. If you have any questions about this section you can contact the EPA ring or if there is someone else in the ERBD office I could get in contact with to gather the data.

Looking forward to hearing from you.

Regards,
Yvonne McMonagle,
Jennings O'Donovan & Partners,
Consulting Engineers,
Finisklin Business Park,
Sligo.
Tel.: 071 9161416
Fax: 071 9161080
Email: ymcmnagle@jodireland.com

AttachmentD.1 RBD_Office

This e-mail message and any attached file is the property of the sender and is sent in confidence to the addressee only. The contents are not to be disclosed to anyone other than the addressee. Unauthorised recipients are requested to preserve this confidentiality and to advise the sender immediately of any error in transmission. If you experience difficulty with opening any attachments to this message, or with sending a reply by email, please telephone on + 44-(0)1235 438151 or fax on + 44-(0)1235 438188.

Any advice contained in this e-mail or any accompanying file attached hereto is for information purposes only. RPS do not take any responsibility for differences between the original and the transmission copy or any amendments made thereafter. If the addressee requires RPS to be responsible for the contents of this e-mail, RPS will be pleased to issue a signed hard copy of the document upon request.

RPS (Ireland) Limited, company number: NI20604 (Northern Ireland). Registered office: Centurion Court, 85 Milton Park Abingdon Oxfordshire OX14 4RY.

RPS Group Plc web link: <<http://www.rpsgroup.com>>

*For inspection purposes only.
Consent of copyright owner required for any other use.*

For inspection purposes only.
Consent of copyright owner required for any other use.

ATTACHMENT D.1



MEATH VILLAGES EFFLUENT DISCHARGE SURVEY

EXECUTIVE SUMMARY

For inspection purposes only.
Consent of copyright owner required for any other use.

Client:

Meath County Council

Consulting Engineers:

Jennings O'Donovan & Partners
Consulting Engineers
Finisklin
Sligo



Unit 9, Block A,
Centrepont Business Park
Oak Road
Dublin 12
Tel: (01) 4605912
Fax: (01) 4605913

Issued 24th November 2009

Bohermeen

Site 1

Average Volume - 18.29 M3/Day @225/h/day - = 81 pe
 Maximum Rate of Discharge - 3.9 l/s
 Method of flow measurement - Area velocity flow monitor

Influent Sampling Point: Inlet to treatment works
 Effluent Sampling Point: Outlet following treatment area
 Summary: Daily Volumes (m3).

Date	MaxFlow Time	MaxFlow (l/s)	MinFlow Time	MinFlow (l/s)	AveFlow (l/s)	TotVolume (m3)
5-NOV-09	21:14	0.7	14:48	0.0	0.0	0.7
6-NOV-09	19:46	2.2	0:00	0.0	0.0	2.0
7-NOV-09	9:16	2.2	0:00	0.0	0.0	0.5
8-NOV-09	8:48	2.5	0:00	0.0	0.0	1.8
9-NOV-09	20:26	3.6	12:26	0.0	0.3	29.0
10-NOV-09	23:02	2.4	14:44	0.0	0.1	8.4
11-NOV-09	20:28	3.9	20:30	0.0	0.5	41.5
12-NOV-09	12:34	3.9	11:52	0.0	0.5	41.9
13-NOV-09	23:48	3.5	23:20	0.0	0.2	14.9
14-NOV-09	9:48	1.6	14:14	0.0	0.1	12.0
15-NOV-09	23:18	3.1	12:00	0.0	0.1	6.0
16-NOV-09	6:50	3.8	6:18	0.0	0.2	20.5
17-NOV-09	14:10	3.0	14:06	0.0	0.1	9.0
18-NOV-09	1:22	3.9	0:44	0.0	0.8	67.9
19-NOV-09	4:12	3.9	4:00	0.0	1.6	
-NOV-		3.9		0.0	0.3	256.1

Comments

Due to the nature of the flow at this site a theoretical flow value was used based on a Flow/Depth relationship. Flow was calculated based on depth and velocity spot checks and intermittent flow data. Outlined below is the equation used for the F/D relationship

$$\text{Flow} = A \times D^B$$

Where A = 0.2660E-5; D = Depth; B = 2.97 (A = Coefficient 1; B = Coefficient 2)

For inspection purposes only.
Consent of copyright owner required for any other use.

ATTACHMENT D.2

[illegible]

For inspection purposes only.
Consent of copyright owner required for any other use.

ATTACHMENT E.3

[illegible]

For inspection purposes only.
Consent of copyright owner required for any other use.

ATTACHMENT E.4

For Quality and Excellence in Laboratory Analysis



Quality Systems and Laboratory Services

P.O. Box 27,
Strandfield Business Park,
Rosslare Road,
Wexford
Tel/Fax 053 9145600
Email: info@qlab.ie

Test Report

Customer: Jennings O'Donovan & Pa
Consulting Engineers
Finisklin Business Park
Sligo
Co. Sligo
Account.: 9413

Report No.: 51460
Report Date: 02/12/2009
Received Date: 10/11/2009
Analysis Date: 10/11/2009
Order No.:
Page: 1 of 2
Revision Date:

Sample ID: 77013

Description: Final Effluent Sample taken @ Bohermeen 09.11.09, 14:10hrs by Conor (Q-Lab)

Ref No:

ID	Test	SOP	Results
<input type="checkbox"/> 77013	Total Nitrogen as N, mg/l	STM-C-13.1.0	74.4
<input type="checkbox"/> 77013	Copper as Cu, mg/l	Subcontracted	0.012
<input type="checkbox"/> 77013	Chromium as Cr mg/l	Subcontracted	<0.001
<input type="checkbox"/> 77013	Arsenic as As mg/l	Subcontracted	0.0004
<input type="checkbox"/> 77013	Sulphates as SO ₄ , mg/l	STM-C-18.2.0	96
<input type="checkbox"/> 77013	Ortho Phosphates (as mg P/L)	STM-C-20.2.0	7.5
<input type="checkbox"/> 77013	Total Phosphorous as P, mg/l	STM-C-19.2.0	9.2
<input checked="" type="checkbox"/> 77013	pH value	STM-C-3.1.00	6.31
<input type="checkbox"/> 77013	Nitrites as NO ₂ , mg/l	STM-C-8.2.04	0.081
<input type="checkbox"/> 77013	Zinc as Zn mg/l	Subcontracted	0.0446
<input type="checkbox"/> 77013	Dissolved oxygen, mg/l	STM-C-10.3.0	4.80
<input checked="" type="checkbox"/> 77013	COD mg/l	STM-C-11.2.0	519
<input checked="" type="checkbox"/> 77013	BOD, mg/l	STM-C-10.2.0	282
<input type="checkbox"/> 77013	Ammonia as NH ₃ -N, mg/l	STM-C-7.2.04	>50
<input checked="" type="checkbox"/> 77013	Suspended Solids, mg/l	STM-C-2.1.00	100
<input checked="" type="checkbox"/> 77013	Conductivity, uS/cm @ 20°C	STM-C-4.1.00	1193
<input checked="" type="checkbox"/> 77013	Nitrates as NO ₃ mg/l	STM-C-9.3.08	0.5
<input type="checkbox"/> 77013	Simazine ug/l	Subcontracted	<0.01
<input type="checkbox"/> 77013	Xylenes ug/l	Subcontracted	<0.5
<input type="checkbox"/> 77013	Tributyltin ug/l	Subcontracted	To Follow
<input type="checkbox"/> 77013	Boron as B mg/l	Subcontracted	0.05
<input type="checkbox"/> 77013	Nickel as Ni mg/l	Subcontracted	0.0029

For Quality and Excellence in Laboratory Analysis



Quality Systems and Laboratory Services

P.O. Box 27,
Strandfield Business Park,
Rosslare Road,
Wexford
Tel/Fax 053 9145600
Email: info@qlab.ie

Test Report

Customer: Jennings O'Donovan & Pa
Consulting Engineers
Finisklin Business Park
Sligo
Co. Sligo
Account.: 9413

Report No.: 51460
Report Date: 02/12/2009
Received Date: 10/11/2009
Analysis Date: 10/11/2009
Order No.:
Page: 2 of 2
Revision Date:

<input type="checkbox"/>	77013	Fluoride as F, mg/l	Subcontracted	0.32
<input type="checkbox"/>	77013	Phenols, ug/l	Subcontracted	<0.5
<input type="checkbox"/>	77013	Cyanide mg/l	Subcontracted	0.044
<input type="checkbox"/>	77013	Toluene ug/l	Subcontracted	<0.5
<input type="checkbox"/>	77013	Lead as Pb, mg/l	Subcontracted	0.0006
<input type="checkbox"/>	77013	Dichloromethane ug/l	Subcontracted	<5.0
<input type="checkbox"/>	77013	Atrazine ug/l	Subcontracted	,0.01
<input type="checkbox"/>	77013	Barium as Ba mg/l	Subcontracted	0.0262
<input type="checkbox"/>	77013	Selenium as Se mg/l	Subcontracted	0.0006
<input type="checkbox"/>	77013	Mercury as Hg mg/l	Subcontracted	<0.00002
<input type="checkbox"/>	77013	Cadmium as Cd mg/l	Subcontracted	<0.0001
<input checked="" type="checkbox"/>	77013	Total Hardness as CaCO ₃ , mg/l	STM-C-6.1.00	180
<input type="checkbox"/>	77013	Temperature, °C	STM-C-41.1.0	11.0

Comments:

Report Authorised By:

Peter O'Byrne

Peter O'Byrne Chem. Lab. Manager

Results relate only to Items Tested. Report must not be reproduced except in full without prior consultation.

☒ Indicates Accredited Test. Opinions and Comments are not included in the scope of Accreditation



Station No: 1500

River Code: 07B04

Situated On: BOYNE

Location: Bective Br

Hydrometric Area: Boyne

Chemical Data Available For:



2001 to 2003

1998 to 2000

1995 to 1997

Biological Data:

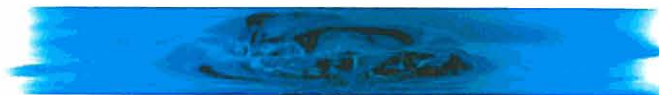
YEAR	QUALITY
2003	3-4
2000	3-4
1997	3-4
1994	3-4
1990	3-4
1986	4
1981	5
1979	4-5
1974	4-5
1971	5

Close Window

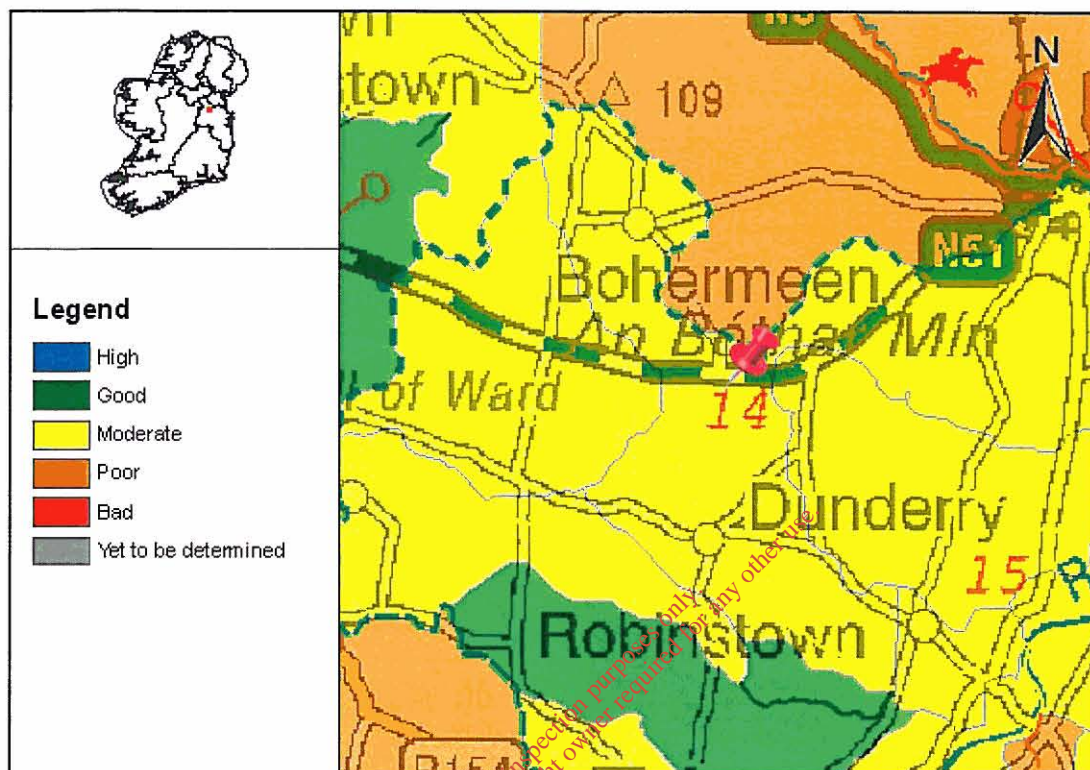
For inspection purposes only.
Consent of copyright owner required for any other use.

For inspection purposes only.
Consent of copyright owner required for any other use.

ATTACHMENT F.1



Full Report for Waterbody Clady, Trib of Boyne



Date Reported to Europe: 22/12/2008

Date Report Created 23/11/2009



Summary Information:

WaterBody Category: Subbasin Waterbody

WaterBody Name: Clady, Trib of Boyne

WaterBody Code: IE_EA_07_311

Overall Status: Moderate

Overall Objective: Restore

Overall Risk: 1a At Risk

Applicable Supplementary Measures: Unsewered; Urban & Industrial; Morphology; Forestry;
Report data based upon Draft RBMP, 22/12/2008.



For inspection purposes only.
Consent of copyright owner required for any other use.

Date Reported to Europe: 22/12/2008

Date Report Created 23/11/2009



Status Report

WaterBody Category: Subbasin Waterbody

WaterBody Name: Clady, Trib of Boyne

WaterBody Code: IE_EA_07_311

Overall Status Result: Moderate



Status Element Description		Result
EX	Status from Monitored or Extrapolated Waterbody	
Biological Elements		
Q	Macroinvertebrates (Q-Value)	n/a
F	Fish	n/a
DI	Phytobenthos (Diatoms)	n/a
FPM	Status value as determined by Margartifera	n/a
Supporting Elements		
MOR	Hydromorphology	n/a
SP	Specific Pollutants	n/a
PC	General Physico-Chemical	Fail
Chemical Status		
PAS	Chemical Status	n/a
Overall Ecological Status		
O	Overall Ecological Status	Moderate

For inspection purposes only.
 Content of copyright owner required for any other use.

Date Reported to Europe: 22/12/2008

Date Report Created 23/11/2009



Risk Report

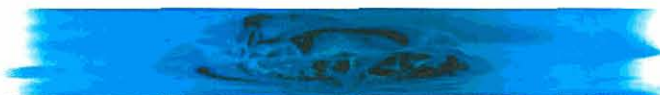
WaterBody Category: Subbasin Waterbody
WaterBody Name: Clady, Trib of Boyne
WaterBody Code: IE_EA_07_311
Overall Risk Result: 1a At Risk



Risk Test Description		Risk	
Point Risk Sources			
RP1	WWTPs (2008)	2b	Not At Risk
RP2	CSOs	2b	Not At Risk
RP3	IPPCs (2008)	2b	Not At Risk
RP4	Section 4s (2008)	2b	Not At Risk
RPO	Overall Risk from Point Sources - Worst Case (2008)	2b	Not At Risk
Diffuse Risk Sources			
RD1	EPA diffuse model (2008)	1b	Probably At Risk
RD2a	Road Wash - Soluble Copper	2b	Not At Risk
RD2b	Road Wash - Total Zinc	2b	Not At Risk
RD2c	Road Wash - Total Hydrocarbons	2b	Not At Risk
RD3	Railways	2b	Not At Risk
RD4a	Forestry - Acidification (2008)	2b	Not At Risk
RD4b	Forestry - Suspended Solids (2008)	2b	Not At Risk
RD4c	Forestry - Eutrophication (2008)	2a	Probably Not At Risk
RD5a	Unsewered Areas - Pathogens (2008)	2a	Probably Not At Risk
RD5b	Unsewered Phosphorus (2008)	2b	Not At Risk
RD5	Overall Unsewered (2008)	2b	Not At Risk
RD6a	Arable	2a	Probably Not At Risk
RD6b	Sheep Dip	2b	Not At Risk
RD6c	Forestry - Dangerous Substances	2b	Not At Risk
RDO	Diffuse Overall -Worst Case (2008)	1b	Probably At Risk

Date Reported to Europe: 22/12/2008

Date Report Created 23/11/2009



Morphological Risk Sources		
RM1	Channelisation (2008)	1a At Risk
RM2	Embankments (2008)	2b Not At Risk
RM3	Impoundments	2b Not At Risk
RM4	Water Regulation	2b Not At Risk
RMO	Morphology Overall - Worst Case (2008)	1a At Risk
Q/RDI or Point/Diffuse		
QPD	Q class/EPA Diffuse Model or worst case of Point and Diffuse (2008)	1b Probably At Risk
Hydrology		
RHY1	Water balance - Abstraction	2b Not At Risk
Overall Risk		
RA	Rivers Overall - Worst Case (2008)	1a At Risk

For inspection purposes only.
 Consent of copyright owner required for any other use.

Date Reported to Europe: 22/12/2008

Date Report Created 23/11/2009



Objectives Report

WaterBody Category: Subbasin Waterbody

WaterBody Name: Clady, Trib of Boyne

WaterBody Code: IE_EA_07_311

Overall Objective: Restore



Objectives Description		Result
Objectives		
OB1	Objective 1 - Protected Areas	Not Applicable
OB2	Objective 2 - Protect High and Good Status	Not Applicable
OB3	Objective 3 - Restore Less Than Good Status	Restore
OB4	Objective 4 - Reduce Chemical Pollution	Not Applicable
OBO	Overall Objective	Restore
Deadline		
YR	Default Year by which the objective must be met	2015
EX	Revised Objective Deadline	2007
OBO	Overall Objective and Deadline	Restore - 2015

For inspection purposes only.
 Consent of copyright owner required for any other use.

Date Reported to Europe: 22/12/2008

Date Report Created 23/11/2009



Basic Measures Report

WaterBody Category: Subbasin Waterbody

WaterBody Name: Clady, Trib of Boyne

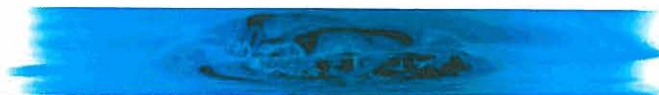
WaterBody Code: IE_EA_07_311



Basic Measures Description		Applicable
Key Directives		
BA	Bathing Waters Directive	No
BI	Birds Directive	No
HA	Habitats Directive	No
DW	Drinking Waters Directive	Yes
SEV	Major Accidents and Emergencies (Seveso) Directive	Yes
EIA	Environmental Impact Assessment Directive	Yes
SE	Sewage Sludge Directive	Yes
UW	Urban Waste Water Treatment Directive	No
PL	Plant Protection Products Directive	Yes
NI	Nitrates Directive	Yes
IP	Integrated Pollution Prevention Control Directive	Yes
Other Stipulated Measures		
CR	Cost recovery for water use	Yes
SU	Promotion of efficient and sustainable water use	Yes
DWS	Protection of drinking water sources	Yes
AB	Control of abstraction and impoundments	Yes
PT	Control of point source discharges	Yes
DI	Control of diffuse source discharges	Yes
GWD	Authorisation of discharges to groundwater	No
PS	Control of priority substances	Yes
MOR	Control of physical modifications to surface waters	Yes
OA	Controls on other activities impacting on water status	Yes
AP	Prevention or reduction of the impact of accidental pollution incidents	Yes

Date Reported to Europe: 22/12/2008

Date Report Created 23/11/2009



Urban and Industrial Discharges Supplementary Measures Report

WaterBody Category: Subbasin Waterbody

WaterBody Name: Clady, Trib of Boyne

WaterBody Code: IE_EA_07_311



	Point discharges to waters from municipal and industrial sources	Result
PINDDIS	Is there one or more industrial discharge (Section 4 licence issued by the local authority or IPPC licence issued by the EPA) contained within the water body?	No
PINDDISR	Are there industrial discharges (Section 4 licence issued by the local authority or IPPC licence issued by the EPA) that cause the receiving water to be 'At Risk' within the water body?	No
PB1	Basic Measure 1 - Measures for improved management.	No
PB2	Basic Measure 2 - Optimise the performance of the waste water treatment plant by the implementation of a performance management system.	No
PB3	Basic Measure 3 - Revise existing Section 4 license conditions and reduce allowable pollution load.	No
PB4	Basic Measure 4 - Review existing IPPC license conditions and reduce allowable pollution load.	No
PB5	Basic Measure 5 - Investigate contributions to the collection system from unlicensed discharges.	No
PB6	Basic Measure 6 - Investigate contributions to the collection system of specific substances known to impact ecological status.	No
PB7	Basic Measure 7 - Upgrade WWTP to increase capacity.	No
PB8	Basic Measure 8 - Upgrade WWTP to provide nutrient removal treatment.	No
PS1	Supplementary Measure 1 - Measures intended to reduce loading to the treatment plant.	No
PS2	Supplementary Measure 2 - Impose development controls where there is, or is likely to be in the future, insufficient capacity at treatment plants.	No
PS3	Supplementary Measure 3 - Initiate investigations into characteristics of treated wastewater for parameters not presently required to be monitored under the urban wastewater treatment directive.	No
PS4	Supplementary Measure 4 - Initiate research to verify risk assessment results and determine the impact of the discharge.	No
PS5	Supplementary Measure 5 - Use decision making tools in point source discharge management.	No
PS6	Supplementary Measure 6 - Install secondary treatment at plants where this level of treatment is not required under the urban wastewater treatment directive.	No
PS7	Supplementary Measure 7 - Apply a higher standard of treatment (stricter emission controls) where necessary.	No

Date Reported to Europe: 22/12/2008

Date Report Created 23/11/2009

water matters

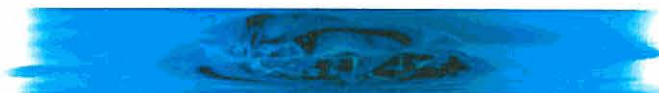
"Help us plan!"

PS8	Supplementary Measure 8 - Upgrade the plant to remove specific substances known to impact on water quality status.	No
PS9	Supplementary Measure 9 - Install ultra-violet or similar type treatment.	No
PS10	Supplementary Measure 10 - Relocate the point of discharge.	No

For inspection purposes only.
Consent of copyright owner required for any other use.

Date Reported to Europe: 22/12/2008

Date Report Created 23/11/2009



Physical Modifications Supplementary Measures Report

WaterBody Category: Subbasin Waterbody

WaterBody Name: Clady, Trib of Boyne

WaterBody Code: IE_EA_07_311

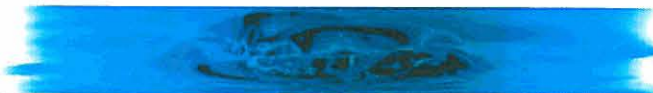


Physical Modifications Supplementary Measures		Applicable
Reduce		
SM1	Codes of Practice	Yes
SM2	Support for voluntary initiatives	Yes
Remediate		
SM3	Channelisation impact remediation schemes	No
SM4	Channelisation investigation	Yes
SM5	Overgrazing remediation	No
SM6	Impassable barriers, impact confirmed, investigation into feasibility of remediation required	No
SM7	Impassable barriers investigation	Yes

For inspection purposes only.
 Consent of copyright owner required for any other use.

Date Reported to Europe: 22/12/2008

Date Report Created 23/11/2009



Unsewered Properties Supplementary Measures Report

WaterBody Category: Subbasin Waterbody

WaterBody Name: Clady, Trib of Boyne

WaterBody Code: IE_EA_07_311



Supplementary Measures for Unsewered Properties		Applicable
SP1	Amend building regulations	Yes
SP2	Establish certified expert panels for site investigation and certification of installed systems	Yes
SP3	Assess applications for new unsewered systems by applying risk mapping/decision support systems and codes of practice	Yes
SP4	Carry out an inspection programme in prioritised locations for existing systems and record results in an action tracking system	No
SP5	Enforce requirements for percolation	No
SP6	Enforce requirements for de-sludging	Yes
SP7	Consider connection to municipal systems	No

For inspection purposes only.
 Consent of copyright owner required for any other use.

Date Reported to Europe: 22/12/2008

Date Report Created 23/11/2009



Forestry Measures Report

WaterBody Category: Subbasin Waterbody

WaterBody Name: Clady, Trib of Boyne

WaterBody Code: IE_EA_07_311



	Forestry Measures for	Applicable
	Forestry	
SF1	Management Instruments - Ensure regulations and guidance are cross referenced and revised to incorporate proposed measures	No
SF2	Acidification - Avoid or limit afforestation on 1st and 2nd order stream catchments in acid sensitive areas	No
SF3	Acidification - Revise the Acidification Protocol to ensure actual minimum alkalinities are detected and revise boundary conditions for afforestation in acid sensitive areas	No
SF10	Pesticide Use - Pre-dip trees in nurseries prior to planting out	No
SF11	Pesticide Use - Maintain registers of pesticide use	No
SF12	Acidification - Restructure existing forests to include open space and structural diversity through age classes and species mix, including broadleaves	No
SF13	Acidification - Mitigate acid impacts symptomatically using basic material	No
SF14	Acidification - Manage catchment drainage to increase residence times and soil wetting	No
SF15	Acidification - Implement measures to increase stream production.	No
SF16	Eutrophication - Establish riparian zone management prior to clearfelling	No
SF17	Eutrophication and Sedimentation - Enhance sediment control	No
SF18	Eutrophication - Manage catchment drainage to increase residence times and soil wetting, including no drainage in some locations	No
SF19	Sedimentation - Establish riparian zone management prior to clearfelling	No
SF20	Sedimentation - Enhance sediment control	No
SF21	Sedimentation - Manage catchment drainage to increase residence times and soil wetting, including no drainage in some locations	No
SF22	Hydromorphology - Enhance drainage network management, minimise drainage in peat soils	No
SF23	Pesticide Use - Develop biological control methods	No

Date Reported to Europe: 22/12/2008

Date Report Created 23/11/2009

water matters

"Help us plan!"

SF4	Eutrophication and Sedimentation - Avoid or limit forest cover on peat sites	No
SF5	Eutrophication and Sedimentation - Change the tree species mix on replanting	No
SF6	Eutrophication and Sedimentation - Limiting felling coup size	No
SF7	Eutrophication and Sedimentation - Establish new forest structures on older plantation sites	No
SF8	Hydromorphology - Audit existing drainage networks in forest catchments	No
SF9	Pesticide Use - Reduce pesticide usage	No

For inspection purposes only.
Consent of copyright owner required for any other use.

Date Reported to Europe: 22/12/2008

Date Report Created 23/11/2009



Environmental Protection Agency

River Water Quality Details



Code 07B041600
Name Boyne
Location MH
EPA River Code 07B04
River Basin District ERBD
Hydrometric Area 07
Catchment Area Boyne



Q Value

Most Recent	2001	2002	2003	2004	2005
3-4			3-4		

The presence of pollution causes changes in flora and fauna of rivers. Well documented changes occur in the macroinvertebrate community in the presence of organic pollution: sensitive species are progressively replaced by more tolerant forms as pollution increases. The Q Value system describes the relationship between water quality and the macroinvertebrate community in numerical terms. Q5 waters have high diversity of macroinvertebrates and good water quality, while Q1 have little or no macroinvertebrate diversity and bad water quality. Intermediate values, Q1-2, 2-3, 3-4 etc denote transitional conditions. For more information on the Q-Value system, see Water Quality in Ireland 2001 - 2003, EPA 2005 (go to What we do/Environmental Monitoring/Water/Rivers).

[Disclaimer](#)

[EPA Home Page](#)

If you have a query about this mapping tool, contact the Environmental Protection Agency, GIS Unit, Office of Environmental Assessment, PO Box 3000, Johnstown Castle Estate, Co. Wexford.

Tel: Locall 1890 33 55 99 or 053 91 60600; Fax 053 91 60699.

Email queries should be directed to info@epa.ie for the attention of the GIS Unit.

Station No: 1600

River Code: 07B04

Situated On: BOYNE

Location: Ballinter Br

Hydrometric Area: Boyne

Chemical Data Available For:



2001 to 2003

1998 to 2000

1995 to 1997

Biological Data:

YEAR	QUALITY
2003	3-4
2000	3-4
1997	3-4
1994	3-4
1990	3-4
1986	4-5
1981	4

Close Window

For inspection purposes only.
Consent of copyright owner required for any other use.

SampleCode	EPA_Site_Cor	SampleDate	Sample	DO_Sat_(%Sat)	DO_(mg/L)	Temperature	pH_Units	Conductivity_(uS/cm)	BOD (mg/L)	Suspended_s
07990104	07B041600	23/01/2007	Grab	88.3	11.39	5	7.98	666	1.31	15.5
07990184	07B041600	22/02/2007	Grab	92.1	10.61	8.2	8.14	688	1.63	19.3
07990356	07B041600	21/03/2007	Grab	93.4	11.68	5.1	8.44	720	1.61	8.3
07990470	07B041600	24/04/2007	Grab	95.5	9.79	13.7	8.22	747	1.33	2
07990596	07B041600	21/05/2007	Grab	119.7	12.05	15.4	8.39	702	3	2.3
07990705	07B041600	27/06/2007	Grab	97.7	9.75	15	8.24	707	1.15	3.8
07990838	07B041600	24/07/2007	Grab	88.5	8.96	14.6	8.04	712	1.85	9.8
07990959	07B041600	29/08/2007	Grab	95.7	9.87	14.5	8.11	760	0.73	31
07991074	07B041600	27/09/2007	Grab	93	10.56	10.2	8.18	742	1	1.5
07991198	07B041600	31/10/2007	Grab	95.9	10.61	10.9	8.29	742	0.89	2.3
07991316	07B041600	29/11/2007	Grab	91.9	10.81	8	8.18	756	1.24	4.3
07991388	07B041600	13/12/2007	Grab	98	11.71	8.1	8.05	733		7.5
08990072	07B041600	29/01/2008	Grab	92.5	10.9	8.4	8.04	735	1.1	8.8
08990200	07B041600	26/02/2008	Grab	93.6	11.21	6.9	8.18	748	0.58	10
08990229	07B041600	19/03/2008	Grab	96.1	11.85	6.7	7.95	724	1.53	8
08990279	07B041600	23/04/2008	Grab	101.9	11.1	11.1	8.21	738	0.94	5.5
08990422	07B041600	27/05/2008	Grab	90.8	9.37	13.8	8.14	691	1.34	2.5
08990464	07B041600	25/06/2008	Grab	88.2	8.89	14.7	8.09	615	1.4	2
08990514	07B041600	16/07/2008	Grab	91.5	9.71	16.0	8.15	721	1.25	5.5
08990636	07B041600	19/08/2008	Grab	71.8	7.05	15.6	7.66	554	1.83	15.1
08990698	07B041600	11/09/2008	Grab	88.8	9.12	13.3	7.97	711	0.82	8
08990777	07B041600	19/11/2008	Grab	100.0	11.46	9.8	8.05	722	0.69	9.2
08990838	07B041600	10/12/2008	Grab	92.2	12.01	4.6	8.16	741	1.08	8.3
09990009	07B041600	27/01/2009	Grab	90.4	11.01	6.4	8.05	728	1.44	14.5
09990074	07B041600	12/02/2009	Grab	92.4	11.79	5.3	7.91	750	1.14	8.3
09990136	07B041600	24/03/2009	Grab	96.1	11.52	7.9	8.27	758	1.11	6.3

NH4_(mgN/L)	MRP_(mgP/	TON_(mgN/L)	NO2_(mgN/L)	Chloride_(mgCl/L)	Alkalinity_(mc	Total Hardne	Colour_	Cu_(mç	Zn_(mg/L)
0.069	0.040	4.84	0.038		316	344	0.006	0.015	
0.054	0.042	3.59	0.033				70	0.004	0.007
0.035	0.032	3.68	0.019	19.5	328	372	45	0.007	0.017
0.012	0.010	3.23	0.024			440		0.003	0.008
0.011	0.007	2.27	0.013	20.2	352	372	26	0.007	0.033
0.020	0.045	1.94	0.013			364		0.003	0.011
0.019	0.044	2.05	0.017			374		0.004	<0.0046
0.009	0.031	2.51	0.007	17.7	368	388	36	0.008	0.005
0.008	0.016	2.16	0.006			384		0.002	<0.0046
0.017	0.019	2.18	0.010			384		0.003	0.010
0.049	0.049	2.10	0.028	19.1	346	396	38	0.004	0.006
0.058	0.035	3.59	0.032			384		0.006	0.008
0.043	0.036	4.04	0.028					0.006	0.008
0.046	0.037	3.05	0.021	19.4	340	388	32	0.005	0.0168
0.033	0.031	2.96	0.018			384		0.005	<0.0046
0.010	0.018	2.80	0.013					0.003	<0.0046
0.008	0.002	1.87	0.024	19.7	286	352	27	0.004	<0.0046
0.047	0.025	2.09	0.049			308		0.005	0.0094
0.025	0.044	2.05	0.018			384		0.002	BLD
0.060	0.058	2.62	0.059	14.7	236	280	147	0.001	0.021
0.025	0.045	2.24	0.022					BLD	BLD
0.027	0.035	2.07	0.021	15.5	352	384	77	0.012	0.008
0.042	0.033	2.37	0.019			396		0.004	BLD
0.064	0.032	2.55	0.022			380			
0.059	0.029	2.84	0.018	18.4	360	388	38	BLD	0.005
0.013	0.017	2.46	0.011						

For inspection purposes only.
Consent of copyright owner required for any other use.