

Water Resources Act 1991
as amended by the Environment Act 1995
Consent to Discharge
Certificate of Holder



**ENVIRONMENT
AGENCY**

Part A

To: DWR CYMRU CYFYNGEDIG
CONSENTS REGULATION OFFICER
PLAS-Y-FFYNNON
CAMBRIAN WAY
BRECON LD3 7HP



The Environment Agency ("the Agency") hereby confirm that the above named person is a/the registered holder of consent CG0043702

Nature of Discharge(s): SEWAGE EFF/STORM EFF/RAINFALL
at DYFFRYN ARDUDWY STW - STORM OV

Note: This certificate should be kept with the consent document for future reference. If you transfer responsibility for the discharge to somebody else you must pass the consent to them and tell the Agency within 21 days. **Responsibility for the consent cannot be disclaimed by the holder but the registration of holder may be transferred to a successor.** To do this please complete the form below, then tear it off and return it to the address shown. If you fail to transfer the consent, even though you are no longer on the site, you may still be liable for prosecution for pollution. If you transfer the consent but do not tell us, you will be committing an offence. In case of any queries please contact your local Environment Agency office.

Part B Please complete in block capitals or type.

To:

Water Resources Act 1991: Notice of transfer of consent to discharge

Consent: Name:
Address:

I/We* hereby serve notice on the Agency that I/we* am/are* no longer a/the* Holder of the above consent which will be/was* transferred to: * delete as appropriate

Name(s) of new holder(s):
Address:

Post Code:

Date of Transfer to new Holder(s);

Signed:..... **Dated:**.....

Name (block capitals):..... **Position:**.....





ASiantaeth YR
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES

CONSENT NO.	CG0043702
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**ENVIRONMENT AGENCY
WATER RESOURCES ACT 1991
(As amended by the Environment Act 1995)**

NOTICE OF MODIFICATION OF CONSENT TO DISCHARGE

TO: Environment Quality Scientist
Dŵr Cymru Cyf.
Pentwyn Road, Nelson, Treharris
Mid Glamorgan CF46 6LY

COPY

WHEREAS the Agency in pursuance of its powers under the Water Resources Act 1991 (as amended by the Environment Act 1995) **GRANTED CONSENT VARIATION** to the making of a discharge of **SEWAGE EFFLUENT** on the 11th day of February 2004

FROM: Dyffryn Ardudwy Wastewater Treatment Works

the Agency in pursuance of its powers under the Water Resources Act 1991 (as amended by the Environment Act 1995) hereby **GIVES NOTICE** that **CONSENT CG0043702** is hereby modified as follows:

A discharge of settled storm sewage

FROM: Dyffryn Ardudwy Wastewater Treatment Works

AT: Access Road off Fford Yr Orsaf, Dyffryn Ardudwy, Gwynedd LL44 2HA

TO: The Ardudwy Marsh Main Drain

The conditions of Schedule 01 consent number CG0043702 dated 11th February 2004 are modified as detailed in this notice.

Subject to the provisions of Paragraphs 7 and 8 of Schedule 10 of the Water Resources Act 1991, no notice shall be served by the Agency which alters the effect of modifications made by this notice, without the agreement in writing of the Consent Holder, during a period of 4 years from the date this notice is served.

Dated this 17th day of May 2004

Signed

IWAN THOMAS
Environment Management Team Leader

Asiantaeth yr Amgylchedd Cymru
Ffordd Penlan, Bangor, Gwynedd. LL57 4DE. Ffôn 01248 670770, Ffacs 01248 670561

Environment Agency Wales
Ffordd Penlan, Bangor, Gwynedd. LL57 4DE. Tel 01248 670770, Fax 01248 670561





CONSENT NO.	CG0043702
SCHEDULE NO.	CG0043702 01
DATED	17th May 2004

Conditions to be modified

The effective date shall be modified by the addition of condition 12 to read as follows:

START DATE

Until discharge is permitted under the terms of this consent, the quality of the effluent from Dyffryn Ardudwy Wastewater Treatment Works shall be controlled under the terms of the consent issued on 26th April 1982. There shall be no discharge under the terms of this consent until the 31st March 2004 or the end of commissioning of the works which ever is the sooner. The Consent Holder shall give the Agency at least 28 days written notice before making the discharge.

Other conditions of the consent

All other conditions of the consent remain in force. Consent CG0043702 is updated accordingly.





ASiantaeth Yr
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES

Ein cyf/Our ref. DR/RP/CG0043702

Dyddiad/Date: 24th May 2004

Tony Andrews
Environment Quality Scientist
Dwr Cymru Cyf
Pentwyn Road, Nelson
Treharris
Mid Glamorgan
CF46 6LY



Dear Sir,

RE: WATER RESOURCES ACT 1991, SCHEDULE 10 (AS AMENDED BY THE ENVIRONMENT ACT 1995) MODIFICATION OF CONSENT TO DISCHARGE NO. CG0043702.

Further to our recent correspondence concerning the consent to discharge sewage effluent from Dyffryn Ardudwy Wastewater Treatment Works, I enclose the Agency's formal notice of the modifications made to the conditions of the consent.

Under the present Scheme of Charges for Discharges to Controlled Waters an annual charge will be made for all consents to discharge, except where the discharge is of sewage effluent of five cubic metres or less per day. The charge is based on information derived from the conditions attached to the consent to discharge, as outlined in the enclosed leaflet. A change in conditions may therefore result in a change in annual charge, you may therefore receive a revised bill in due course.

If you are not satisfied with the new conditions of the consent you may appeal against the decision to The National Assembly for Wales at Cathays Park, Cardiff CF10 3NQ.

Please take careful note that if the holder of the consent changes, you must inform the Agency IN WRITING as soon as possible of the name of the new holder. This is to ensure that the rights and charges associated with the Consent are transferred to the holder. A Certificate of Holder notice will be sent to you shortly which is designed for this purpose, and should be kept safely with the Consent until required.

Asiantaeth yr Amgylchedd Cymru
Ffordd Caer, Bwcle, Sir y Fflint CH7 3AJ
Ffon 01244 550124 Ffacs 01244 550144

Environment Agency Wales
Chester Road, Buckley, Flintshire CH7 3AJ
Tel 01244 550124 Fax 01244 550144



**ASiantaeth YR
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES**

If you have any queries regarding the enforcement of this consent, please do not hesitate to contact Iwan Thomas, Team Leader Environment Protection, Environment Agency Wales, Llwyn Brain, Ffordd Penlan, Parc Menai, Bangor, Gwynedd, LL57 4DE.

Yours sincerely,

Kelvin Graham
Team Leader Customer Contact & Authorisations

Asiantaeth yr Amgylchedd Cymru
Ffordd Caer, Bwele, Sir y Fflint CH7 3AJ
Ffon 01244 550124 Ffacs 01244 550144

Environment Agency Wales
Chester Road, Buckley, Flintshire CH7 3AJ
Tel 01244 550124 Fax 01244 550144



Water Resources Act 1991

as amended by the Environment Act 1995

Consents to Discharge

Certificate of Holder



ASiantaeth Yr
Amgylchedd Cymru
Environment
Agency Wales

Part A

To : **DWR CYMRU CYFYNGEDIG**
PENTWYN ROAD
NELSON
TREHARRIS
MID GLAMORGAN CF46 6LY

NB: For a body corporate the job title is a point of contact.

Holder Start Date : 11 February 2004

The Environment Agency ("the Agency") hereby confirm that the above named person (or organisation) is a / the registered Holder of the Consent : CG0043702 Consent Issued : 11 February 2004

Nature of Discharge(s) SSOR Sewage effluent

t SH5772323637 DYFFRYN ARDUDWY WWTW

Note : This certificate should be kept with the consent document for future reference. If you transfer responsibility for the discharge to somebody else, you must pass the consent to them and tell the Agency within 21 days. Responsibility for the consent cannot be disclaimed by the Holder but the registration of Holder may be transferred to a successor. To do this, please complete the form below (Part B), then tear it off and return it to the address shown. If you fail to transfer the consent, even though you are no longer on the site, you will still be liable for prosecution for pollution. If you transfer the consent but do not tell us, you will be committing an offence. In case of any queries, please contact your local Environment Agency office, quoting the Consent Reference.

----- cut here -----
Part B

Please complete in block capitals or type

To : **Water Resources Act 1991 : Notice of transfer of Consent to Discharge**

Consent Reference : CG0043702

Name : DWR CYMRU CYFYNGEDIG

Consent Issued : 11 February 2004

Address : PENTWYN ROAD

NELSON

TREHARRIS

MID GLAMORGAN CF46 6LY

I / We hereby serve notice on the Agency that I / we* am / are* no longer a / the* Holder of the above consent which will be / was* transferred to :*

** delete as appropriate*

Name(s) of the new Holder(s) :

Post Code :

Date of Transfer to new Holder(s)

Signed :

Dated :

Name (block capitals) :

Position (if appropriate) :

(to be completed when signing on behalf of corporate bodies)

Deddf Adnoddau Dwr 1991

fel y'i diwygiwyd gan Ddeddf yr Amgylchedd 1995

Caniatâd Gollwng

Tystysgrif Daliwr



ASiantaeth yr
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES

Rhan A

At: DWR CYMRU CYFYNGEDIG

PENTWYN ROAD

NELSON

TREHARRIS

MID GLAMORGAN CF46 6LY

DS: I gorfforaeth gorfforedig mae teitl y swydd yn bwynt cysylltu.

Dyddiad Cychwyn y Daliwr : 11 Chwefror 2004

Mae Asiantaeth yr Amgylchedd ("yr Asiantaeth") yn cadarnhau drwy hyn mai / bod y sawl (neu sefydliad) a enwyd uchod yw / yn ddaliwr cofrestredig y caniatâd : CG0043702 Cyhoeddwyd y Caniatâd : 11 Chwefror 2004

Natur y Gollyngiad(au) : SSOR Carthffrw

yn SH5772323637 DYFFRYN ARDUDWY WWTW

Noder : Dylid cadw'r dystysgrif hon gyda'r ddogfen ganiatâd i gyfeirio ati yn y dyfodol. Os byddwch yn trosglwyddo cyfrifoldeb am y gollyngiad i rywun arall, rhaid i chi drosglwyddo'r caniatâd iddo ef neu hi a dweud wrth yr Asiantaeth cyn pen 21 diwrnod. Ni all y Daliwr wadu cyfrifoldeb am y caniatâd, ond gall cofrestriad y Daliwr gael ei drosglwyddo i olynnydd. I wneud hynny, byddwch gystal â llenwi'r ffurflen isod (Rhan B), yna'i dychwelyd i'r cyfeiriad a nodir. Os fethwch â throsglwyddo'r caniatâd, hyd yn oed os nad ydych ar y safle mwyach, gallwch gael eich erlyn am achosi llygredd. Os trosglwyddwch y caniatâd ond heb ddweud wrthym, yna byddwch yn cyflawni trosedd. Os bydd gennyhych unrhyw ymholiadau a fydddech gystal â chysylltu â'ch swyddfa Asiantaeth yr Amgylchedd lleol, gan ddyfynnu Cyfeirnod y Caniatâd.

-----torrwch yma-----

Rhan B

Llenwch mewn priflythrennau bras neu deipio

At: Deddf Adnoddau Dwr 1991 : Hysbysiad am drosglwyddo Caniatâd Gollwng

Cyfeirnod y Caniatâd : CG0043702

Enw : DWR CYMRU CYFYNGEDIG

Cyhoeddwyd y 11 Chwefror 2004

Cyfeiriad : PENTWYN ROAD

Caniatâd :

NELSON

TREHARRIS

MID GLAMORGAN CF46 6LY

Yr wyf fi / Yr ydym ni* drwy hyn yn hysbysu'r Asiantaeth nad fi / ni mwyach yw* Daliwr / Deiliaid y caniatâd uchod a fydd yn cael / cafodd ei drosglwyddo i

* dilēer fel yn briodol

Enw(au) y Daliwr / Deiliaid newydd :

Côd Post :

Dyddiad Trosglwyddo i'r Daliwr / Deiliaid newydd :

Llofnodwyd :

Dyddiedig :

Enw (priflythrennau bras) :

Swydd (os yn briodol) :

(i'w lenwi pan yn llofnodi ar ran corfforaethau corfforedig)

CONSENT NO.	CG0043702
SCHEDULE NO.	CG0043702 01
DATE ISSUED	11th February 2004



**ASiantaeth Yr
Amgylchedd Cymru
Environment
Agency Wales**

CONDITIONS OF CONSENT TO DISCHARGE

Settled storm sewage ("the Discharge")

FROM: Dyffryn Ardudwy Wastewater Treatment Works

NATURE

1. The Discharge shall consist solely of settled storm sewage.

LOCATION

2. The Discharge shall be made in the manner and at the place specified as:
 - (a) discharging via a 12 inch diameter pipe;
 - (b) discharging to the Ardudwy Marsh Main Drain;
 - (c) at National Grid Reference SH 57723 23637;
 - (d) shown marked 'Consent Point' on Plan CG0043702 attached as Annex 2.

SAMPLE POINT

3. A sample point shall be provided and maintained at National Grid Reference SH 57888 23621, as shown marked 'Discharge Sample point' on the attached Plan number CG0043702, or some other point as agreed in writing with the Agency, so that a representative spot sample of the Discharge may be obtained. The Consent Holder shall ensure that all constituents of the Discharge pass through the said sampling point at all times and in any legal proceedings it shall, for the purposes of Section 10 of the Rivers (Prevention of Pollution) Act 1961, be presumed, until the contrary is shown, that any sample of the Discharge taken at the said sampling point is a sample of what was being discharged into controlled waters.



CONSENT NO.	CG0043702
SCHEDULE NO.	CG0043702 01



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Agency Wales**

VOLUME

4. The Discharge shall occur when and only for as long as, the storm tanks are full. The discharge of storm sewage to the storm tank shall only occur when the rate of flow at the storm sewage separating weir is in excess of 25.9 litres per second due to rainfall and/or snow melt and shall consist only of flows in excess of this figure. The storm tanks shall be emptied automatically and their contents returned for full treatment as soon as practicable after cessation of the overflow to the storm tanks.
5. The capacity of the storm tank(s) shall be at least 186.5 cubic metres.

COMPOSITION

6.
 - (a) The discharge shall have passed, without prior comminution or maceration, through a screening device having apertures no greater than 10 millimeters in one dimensions.
 - (b) The screening device shall be maintained in an efficient operational condition.
 - (c) All screenings must be removed and disposed of in a manner such as to prevent entry to the discharge.

WORKS OPERATION

7.
 - (a) The works shall be operated and the effluent shall be treated in a manner which, so far as reasonably practicable, minimises the polluting effects of the discharge made from the works on controlled waters.
 - (b) This condition does not require any alteration of the works or a change in the type of treatment used.

RECORDING AND REPORTING

8.
 - (a) The Consent Holder shall establish and operate a documented maintenance programme and record all non-routine actions undertaken that may have adversely affected the operation of the storm tanks. Copies of the programme shall be made available for inspection by the Agency's officers at all reasonable times.
 - (b) On request the Consent Holder shall supply the Agency with a written report on the maintenance and all non-routine actions that may have adversely affected the operation of the storm tanks.



CONSENT NO.	CG0043702
SCHEDULE NO.	CG0043702 01



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9. The Consent Holder shall notify the Agency in writing if any known or planned introduction or material change in respect of discharges from trade premises to the environment occurs, that may increase or introduce into the effluent any "dangerous substance" (set out in Annex 1 to this notice as updated from time to time and notified to the Consent Holder in writing), and any other substance considered by the Consent Holder as having or likely to have a significant effect on the receiving waters.

SUBSTANTIAL CHANGE

10. (a) A discharge shall not be made from the works if it would cause a significant increase in the polluting effects of the discharge on controlled waters as a result of a new or altered discharge of trade effluent into the works.
- (b) A discharge of trade effluent into the works is new if -
- (i) it is made by the sewerage undertaker and is of a kind not made into the works by the undertaker immediately before the date of effect of this consent; or
 - (ii) it is made by a third party and the discharge is authorised on or after that date.
- (c) A discharge of trade effluent into the works is altered if -
- (i) it is made by the sewerage undertaker and its composition or quantity changes significantly on or after the date of effect of this consent ; or
 - (ii) it is made by a third party and the alteration of the discharge is authorised on or after that date.
- (d) An increase in the polluting effects of the Discharge on controlled waters is not significant for the purposes of this condition if it relates to any characteristic of the Discharge which is specifically regulated by conditions in this consent but it may be significant if it is caused by a change in some other characteristic of the Discharge.



CONSENT NO.	CG0043702
SCHEDULE NO.	CG0043702 01



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Environment
Agency Wales**

- (e) For the purposes of this condition "trade effluent" means -
- (i) any discharge by the sewerage undertaker other than
 - (1) domestic sewage from premises connected directly or indirectly to the works; or
 - (2) surface water run-off;
 - (ii) any discharge by a third party which is authorised under Chapter III of Part IV of the Water Industry Act 1991 or which is only accepted as a result of a contract with the sewerage undertaker.

UNAUTHORISED DISCHARGES

11. (a) A discharge made from the works shall not contain any poisonous, noxious or polluting matter or solid waste matter which is attributable to any unauthorised discharge into the works.
- (b) A discharge into the works is unauthorised if it is made by a third party and either there is no obligation to receive it or conditions subject to which there is an obligation to receive it are not observed.
- (c) Nothing in this, or any other, condition of this consent prevents anyone from relying on any defence available to them under Section 87 of the Water Resources Act 1991.

START DATE

12. Until discharge is permitted under the terms of this consent, the quality of the effluent from Dyffryn Arduwy Wastewater Treatment Works shall be controlled under the terms of the consent issued on 26th April 1982.
- There shall be no discharge under the terms of this consent until the 31st March 2005 or the end of commissioning of the works which ever is the sooner. The Consent Holder shall give the Agency at least 28 days written notice before making the discharge.



CONSENT NO.	CG0043702
SCHEDULE NO.	CG0043702 01



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Amgylchedd Cymru
ENVIRONMENT
AGENCY WALES

ANNEX 1

- | | |
|--|------------------------------|
| 1. Mercury and its compounds | 2. Cadmium and its compounds |
| 3. Hexachlorocyclohexane
(lindane and related compounds) | 4. Carbon tetrachloride |
| 5. DDT (the isomers of 1,1,1-trichloro-2,2 bis{p-chlorophenyl} ethane) | |
| 6. Pentachlorophenol (PCP) | 7. Aldrin |
| 8. Dieldrin | 9. Endrin |
| 10. Isodrin | 11. Hexachlorobenzene (HCB) |
| 12. Hexachlorobutadiene (HCBd) | 13. Chloroform |
| 14. Polychlorinated biphenyls | 15. Dichlorvos |
| 16. 1,2-Dichloroethane | 17. Trichlorobenzene |
| 18. Atrazine | 19. Simazine |
| 20. Tributyltin compounds | 21. Triphenyltin compounds |
| 22. Trifluralin | 23. Fenitrothion |
| 24. Azinphos-methyl | 25. Malathion |
| 26. Endosulfan | 27. Lead |
| 28. Chromium | 29. Zinc |
| 30. Copper | 31. Nickel |
| 32. Arsenic | 33. *Iron |
| 34. *pH if outside the range 5.5 to 9.0 | 35. *Boron |
| 36. Vanadium | 37. PCSD'S |
| 38. Cyfluthrin | 39. Sulcofuron |
| 40. Flucifuron | 41. Permethrin |
| 42. 4-Chloro-3-methyl-phenol | 43. 2-Chlorophenol |
| 44. 2,4-Dichlorophenol | 45. 2,4-D (ester) |
| 46. 2,4-D (non ester) | 47. 1,1,1-Trichloroethane |
| 48. 1,1,2-Trichloroethane | 49. Bentazone |
| 50. Benzene | 51. Biphenyl |
| 52. Chloronitrotoluenes | 53. Demeton |
| 54. Dimethoate | 55. Linuron |
| 56. MCPA | 57. Mecoprop |
| 58. Mevinphos | 59. Napthalene |
| 60. Omethoate | 61. Toluene |
| 62. Triazophos | 63. Xylene |
| 64. Cyanide | 65. Azinphos-ethyl |
| 66. Fenthion | 67. Parathion |
| 68. Parathion-methyl | 69. Trichloroethylene |
| 70. Tetrachloroethylene | 71. Dioxins |
| 72. PAHs | 73. Nonyl phenol |
| 74. Nonyl phenyl ethoxylate | 75. Di-ethylhexyl phthalate |
| 76. Bisphenol-A | 77. Diazinon |
| 78. Chlorfenvinphos | 79. Chlorotoluron |
| 80. Isoproturon | 81. Diuron |
| 82. Propetamphos | 83. Flumethrin |
| 84. Amitraz | 85. High-Cis Cypermethrin |
| 86. Cyromazine | 87. Deltamethrin |
| 88. Cypermethrin | |

This list is applicable as at 1 December 1998 and will be updated as and when changes to the relevant legislative requirements occur.

*Notification to the Agency by the Consent holder is only required in respect of changes to trade effluents likely to cause significant changes to the pH value, and/or iron or boron concentrations, of the crude sewage.



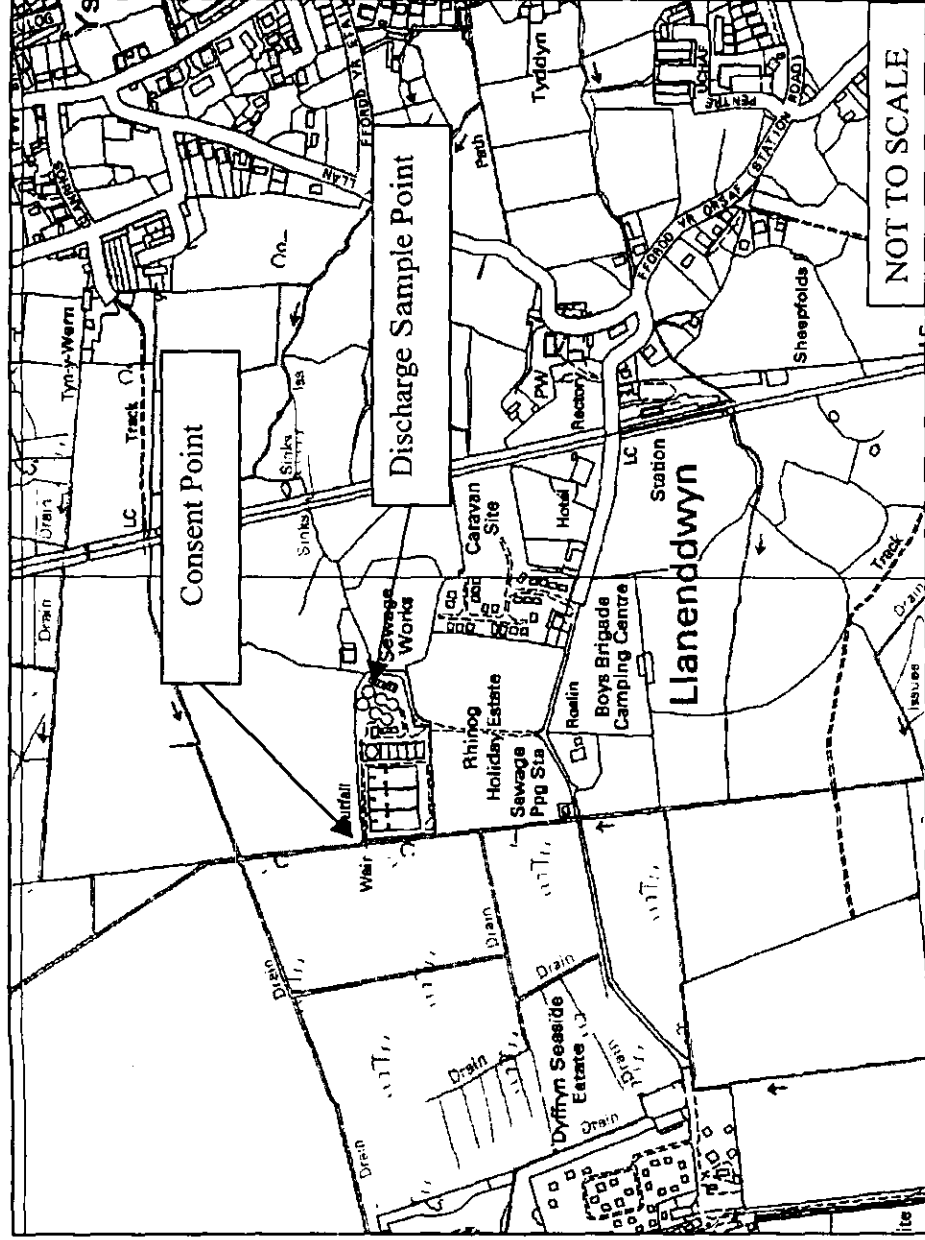
CONSENT NO.	CG0043702
SCHEDULE NO.	CG0043702 01



ASiantaeth Yr
Amgylchedd Cymru
Environment
Agency Wales

ANNEX 2

Plan CG0043702



NOT TO SCALE

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ASiantaeth YR
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES

Eich cyf/Your ref.
Ein cyf/Our ref. DR/RP/CG0043702
Enquiries Ruth Prichard
Dyddiad/Date: 12th February 2004

Environment Quality Scientist
Dwr Cymru Cyfyngedig
Pentwyn Road
Nelson
Treharris
Mid Glamorgan
CF46 6LY

COPY

Dear Sir/Madam,

RE: WATER RESOURCES ACT 1991, SCHEDULE 10 (AS AMENDED BY THE ENVIRONMENT ACT 1995) APPLICATION FOR VARIATION OF CONSENT TO DISCHARGE NO CG0043702

Further to your application for variation of consent of the Agency to discharge under the provisions of Section 88 of the Water Resources Act 1991, I enclose the Agency's formal notice of the variations made to the conditions of the consent to discharge sewage effluent from Dyffryn Ardudwy Wastewater Treatment Works, Access road off Fford yr Orsaf, Dyffryn Ardudwy, Gwynedd, LL44 2HA.

Under the present Scheme of Charges for Discharges to Controlled Waters an annual charge will be made for all consents to discharge, except where the discharge is of sewage effluent of five cubic metres or less per day. This charge is based on information derived from the conditions attached to the consent to discharge, as outlined in the enclosed leaflet. A change in conditions may therefore result in a change in annual charge, you may therefore receive a revised bill in due course.

If you are not satisfied with the new conditions of the consent you may appeal against the decision to the *<Secretary of State DEFRA c/o DTLR, Environment Appeals Administration, The Planning Inspectorate, Room 4/19, Eagle Wing, Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6PN. / National Assembly for Wales at Cathays Park, Cardiff CF10 3NQ.>

Please take careful note that if the holder of the consent changes, you must inform the Agency IN WRITING as soon as possible of the name of the new holder. This to ensure that the rights and charges associated with the Consent are transferred to the new holder. A certificate of Holder notice will be sent to you shortly which is designed for this purpose, and should be kept safely with the Consent until required.

Asiantaeth yr Amgylchedd Cymru
Ffordd Caer, Bwcle, Sir y Fflint CH7 3AJ
Ffôn 01244 550124 Ffacs 01244 550144

Environment Agency Wales
Chester Road, Buckley, Flintshire CH7 3AJ
Tel 01244 550124 Fax 01244 550144





ASiantaeth yr
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES

If you have any queries regarding the enforcement of this code, please do not hesitate to contact Iwan Thomas Team Leader Environment Protection, Environment Agency, Ffordd Penlan, Parc Menai, Bangor, Gwynedd, LL57 4DE

Yours sincerely,

Kelvin Graham
Team Leader Customer Contact and Authorisations
Enc.

Asiantaeth yr Amgylchedd Cymru
Ffordd Caer, Bwcle, Sir y Fflint CH7 3AJ
Ffôn 01244 550124 Ffacs 01244 550144

Environment Agency Wales
Chester Road, Buckley, Flintshire CH7 3AJ
Tel 01244 550124 Fax 01244 550144





COPY

CYNGOR CEFN GWLAD CYMRU COUNTRYSIDE COUNCIL FOR WALES

CADEIRYDD/CHAIRMAN: JOHN LLOYD JONES OBE

PRIF WEITHREDWR/CHIEF EXECUTIVE: ROGER THOMAS

Anfonwch eich ateb at/Please reply to:

Lucy Kay

North West Area Office

Ffôn/Phone: 01248 672500 Ffacs/Fax: 01248 679259

Liys-y-Bont

Ebostr/Email: l.kay@ccw.gov.uk

Ffordd Parc Menai

BANGOR

Gwynedd LL57 4BN

Kelvin Graham
Team Leader Customer Contact & Authorisations
Environment Agency Wales
Chester Road
Buckley
Flintshire
CH7 3AJ

Ein cyf/Our ref: LK/SH41.1.12.0/SH52.2

Eich cyf/Your ref: DR/RP/CG0043702

16th January 2004

Dear Kelvin

WATER RESOURCES ACT 1991, SCHEDULE 10 (AS AMENDED BY THE ENVIRONMENT ACT 1995): FORMAL CONSULTATION. APPLICATION FOR CONSENT TO DISCHARGE SEWAGE EFFLUENT UNDER STORM OR EMERGENCY CONDITIONS BY DWR CYMRU CYF FROM DYFFRYN ARDUDWY WWTW, ACCESS ROAD OFF FFORDD YR ORSAF, DYFFRYN ARDUDWY, GWYNEDD. APPLICATION NO: CG0043702

Thank you for sending us a copy of the above application for discharge consent on the above site including the Appendix 11: Proforma for new applications within Stage 2 criteria.

We do not envisage any significant impact on the features of the Pen Llŷn a'r Sarnau cSAC or Morfa Harlech a Morfa Dyffryn cSAC.

Yours sincerely

Lucy Kay
Marine Conservation Officer
North West Area



Llywodraeth Cynulliad Cymru
Welsh Assembly Government

CORFF NODDIEDIG | SPONSORED BODY

APPENDIX 11

Form HR01: Proforma for new applications within Stage 2 criteria.



**ENVIRONMENT
AGENCY**

Environment Agency Record of Assessment of Likely Significant Effect On A European Site (Stage 2)

The new application for a please fill in details detailed below is within the Stage I criteria of please fill in details, and in order to progress the application a Stage 2 assessment and consultation with EN/CCW is required.

PAR 11A
 To be completed by relevant technical project office in consultation with Conservation/Ecology/section and EN/CCW.

1. Type of permission/activity:	Water Resources Act (1991) (as amended by Environment Act 1995) consent to discharge
2. Agency reference no:	CG0043701 (Final Effluent) and CG0043702 (Storm)
3. National Grid reference:	SH 57723 23637
4. Site reference:	Dyffryn Ardudwy WwTW Access Road Off Fford Yr Orsaf Dyffryn Ardudwy Gwynedd LL44 2HA
5. Brief description of proposal:	Variation to improve the Dyffryn Ardudwy WwTW Scheme under AMP3 improvements <ul style="list-style-type: none"> - Installation of new 6mm screens on crude inlet. - Introduction of ferric salt dosing system to enhance performance of works during peak tourist season. - Automation of recirculation facility for the biological filters in order to sustain the biological treatment process at times of low influent flows. - Recomission of two dissused storm tanks. - Provides screening of storm flows to prevent gross solids enetering the receiving watercourse during storm conditions.
6. European site name(s) and status:	Pen Llyn a'r Sarnau / Lley Peninsula and the Sarnau, cSAC Morfa Dyffryn SSSI
7. List of interest features:	1.12 Estuarine and intertidal habitats 1.13 Submerged marine habitats 1.10 Coastal lagoons 2.11 Coastal plants 2.12 Marine mammals

<p>8. Is the proposal directly connected with or necessary to the management of the site for nature conservation?</p>	<p>No</p>	
<p>9. What potential hazards are likely to affect the interest features? (Refer to relevant sensitivity matrix and only include those to which the interest features are sensitive). Are the interest features potentially exposed to the hazard?</p>		
<p>Sensitive Interest Feature:</p>	<p>Potential hazard:</p>	<p>Potential exposure to hazard and mechanism of effect/impact if known:</p>
<p>Estuaries and intertidal habitats Estuaries</p>	<p>A, b, d, e, f, g, h</p>	
<p>Submerged marine habitats Reefs Sandbanks which are slightly covered by sea water all the time Submerged or partially submerged sea caves Salicornia and other annuals colonising mud and sand</p>	<p>A, b, d, e, g, h</p>	
<p>Coastal habitats Coastal lagoons Large shallow inlets and bays Mudflats and sandflats not covered by seawater at low tide</p>	<p>N/a</p>	
<p>Coastal plants Atlantic salt meadows</p>	<p>N/a</p>	
<p>Marine mammals <i>Halichoerus grypus</i> – Grey seal <i>Tursiops truncatus</i> – Bottlenose dolphin</p>	<p>A, e, g</p>	
<p>Key: - A – Toxic contamination B – Nutrient enrichment C – pH changes D – Changes in salinity regime E – changes to thermal regime F – Physical damage G – Turbidity H – Siltation</p>		
<p>10. Is the potential scale or magnitude of any effect likely to be significant?</p>		

<p>a) Alone? (explain conclusion, e.g. in relation to minimumus criteria)</p>	<p>No</p>	
<p>b) In combination with other plans or projects? (Explain conclusion and which plans/projects have been included, including those associated with other functions).</p>	<p>No</p>	
<p>11. Conclusion: Is the proposal likely to have a significant effect 'alone or in combination' on a European site? (justification – attach any relevant supporting information)</p>	<p>No – this is an existing site/discharge undergoing AMP3 improvements. Discharge will have limits tighter than those on existing consent – currently in talks with DCWW. Drain flows into Afon Artro where dilution would be expected to lessen any impact on the cSAC designations impacted.</p>	
<p>12. Name of EA Officer:</p>	<p>Karen Owen (Ext4584)</p>	<p>Date: 23/12/03</p>
<p>13. EN/CCW comment on assessment:</p>	<p>We do not consider that this discharge is likely to have a significant impact on the features of the designated sites.</p> <p>The application is for improvements to the current storm / emergency discharges. The other European site relevant to this application but not listed is Morfa Harlech and Morfra Dyffryn cSAC (the Morfa Dyffryn SSSI covers part of this European site).</p> <p>The features that are of most relevance in terms of potential impact from this discharge are estuarine and intertidal habitats including saltmarsh, coastal plants and otter. Although we are not currently able to specify particular water quality requirements for these features, we are not aware that the current discharge is having a significant impact on these features. Therefore, improvements to the discharge detailed in this application should reduce the likelihood of a significant impact on the features.</p>	
<p>14. Name of EN/CCW Officer:</p>	<p>LUCY KAY <i>Lucy Kay</i></p>	<p>Date: 16/1/04</p>
<p>IF THE PROPOSAL IS LIKELY TO HAVE A SIGNIFICANT EFFECT AN APPROPRIATE ASSESSMENT WILL BE REQUIRED (see part B for suggested scope).</p>		

Part B - SUGGESTED SCOPE OF THE APPROPRIATE ASSESSMENT

-

15. EN/CCW Comment on scope of appropriate assessment:

16. Name of EN/CCW Officer:

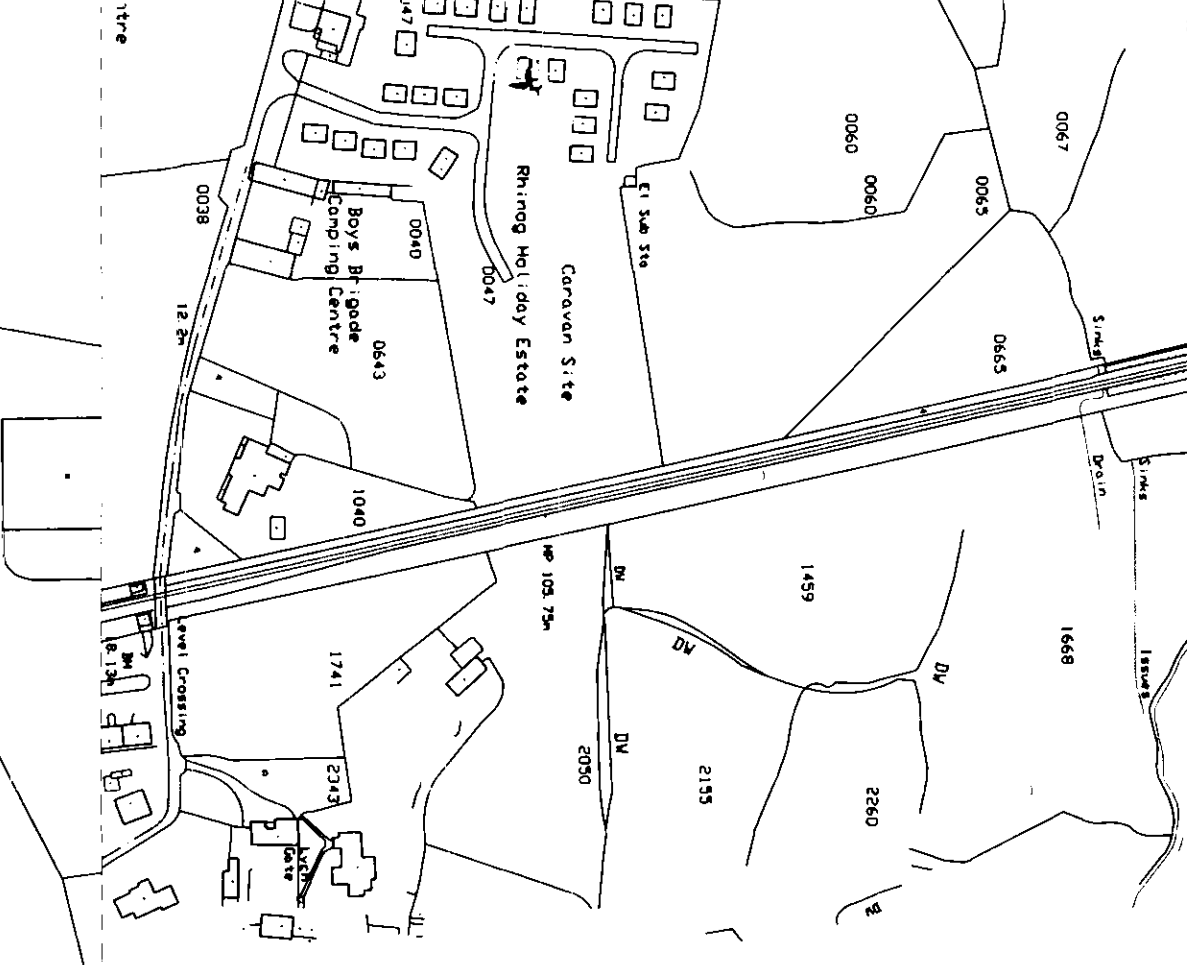
Date:

SEE PREVIOUS ISSUES FOR PAST REVISION DETAILS

REV	REVISION DESCRIPTION	DATE	BY
A			Clydwen

DESIGN APPROVAL			
ELECTRICAL ENGINEER	PROCESS ENGINEER	MANAGER APPROVAL	
METALLURGICAL ENGINEER			

GENERAL NOTES



Storm Water Sampling Point SH51988 23621

FFT flow Monitoring Point SH51897 23613

WWTW Inflow Sampling Point SH51898 23597

NEW DRAWING

MEICA PROCESS LTD

17 Station Road Fawcett
 Warrington W91 7DB
 Tel: 01902 751772

CLIENT: DWR CYMRU WELSH WATER

PROJECT: DYFFRYN ARDDWY STW


EA CONSENT APPLICATION

GENERAL ISSUE NUMBER BY Clydwen	GENERAL ISSUE DATE	GENERAL ISSUE APPROVED BY	SCALE	REV
0934/9011			N/T S	A

9 10 11 12 13 14 15 16

NEW AT Storrord Border

COPY

APPENDIX 11	
Form HR01: Proforma for new applications within Stage 2 criteria.	
 ENVIRONMENT AGENCY	
<p>Environment Agency Record of Assessment of Likely Significant Effect On A European Site (Stage 2)</p> <p>The new application for a please fill in details detailed below is within the Stage I criteria of please fill in details, and in order to progress the application a Stage 2 assessment and consultation with EN/CCW is required.</p>	
<p>PART A To be completed by relevant technical/project officer in consultation with Conservation/Ecology section and EN/CCW</p>	
1. Type of permission/activity:	Water Resources Act (1991) (as amended by Environment Act 1995) consent to discharge
2. Agency reference no:	CG0043702
3. National Grid reference:	SH 57723 23637
4. Site reference:	Dyffryn Ardudwy WwTW Access Road Off Fford Yr Orsaf Dyffryn Ardudwy Gwynedd LL44 2HA
5. Brief description of proposal:	Variation to improve the Dyffryn Ardudwy WwTW Scheme under AMP3 improvements
6. European site name(s) and status:	Pen Llyn a'r Sarnau / Lleyn Peninsula and the Sarnau, cSAC Morfa Dyffryn SSSI
7. List of interest features:	1.12 Estuarine and intertidal habitats 1.13 Submerged marine habitats 1.10 Coastal lagoons 2.11 Coastal plants 2.12 Marine mammals
8. Is the proposal directly connected with or necessary to the management of the site for nature conservation?	No
9. What potential hazards are likely to affect the interest features? (Refer to relevant sensitivity matrix and only include those to which the interest features are sensitive). Are the interest features potentially exposed to the hazard?	

Sensitive Interest Feature:	Potential hazard:	Potential exposure to hazard and mechanism of effect/impact if known:
Estuaries and intertidal habitats Estuaries	A, b, d, e, f, g, h	
Submerged marine habitats Reefs Sandbanks which are slightly covered by sea water all the time Submerged or partially submerged sea caves Salicornia and other annuals colonising mud and sand	A, b, d, e, g, h	
Coastal habitats Coastal lagoons Large shallow inlets and bays Mudflats and sandflats not covered by seawater at low tide	N/a	
Coastal plants Atlantic salt meadows	N/a	
Marine mammals <i>Halichoerus grypus</i> – Grey seal <i>Tursiops truncatus</i> – Bottlenose dolphin	A, e, g	
Key: - A – Toxic contamination B – Nutrient enrichment C – pH changes D – Changes in salinity regime E – changes to thermal regime F – Physical damage G – Turbidity H - Siltation		
10. Is the potential scale or magnitude of any effect likely to be significant?		
a) Alone? (explain conclusion, e.g. in relation to de minimus criteria)	No	
b) In combination with other plans or projects? (Explain conclusion and which plans/projects have been included, including those associated with other functions).	No	

APPENDIX 11

Stage 2

FORM HROI PROFORMA

<p>11. Conclusion: Is the proposal likely to have a significant effect 'alone or in combination' on a European site? (justification – attach any relevant supporting information)</p>	<p>No –</p>	
<p>12. Name of EA Officer:</p>	<p>Karen Owen (Ext4584)</p>	<p>Date:23/12/03</p>
<p>13. EN/CCW comment on assessment:</p>		
<p>14. Name of EN/CCW Officer:</p>		<p>Date:</p>
<p>IF THE PROPOSAL IS LIKELY TO HAVE A SIGNIFICANT EFFECT AN APPROPRIATE ASSESSMENT WILL BE REQUIRED (see part B for suggested scope).</p>		

Part B - SUGGESTED SCOPE OF THE APPROPRIATE ASSESSMENT

-

15. EN/CCW Comment on scope of appropriate assessment:

16. Name of EN/CCW Officer:

Date:



ASiantaeth Yr
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES

Eich cyf/Your ref.

Ein cyf/Our ref. DR/RP/CG0043702

Dyddiad/Date: 21st December 2003

Fiona Evans
CCW,
Victoria Buildings,
Meyrick Street,
Dolgellau,
Gwynedd
LL40 11R

COPY

Dear Ms Evans,

**WATER RESOURCES ACT 1991, SCHEDULE 10 (AS AMENDED BY THE ENVIRONMENT ACT 1995): FORMAL CONSULTATION. APPLICATION FOR CONSENT TO DISCHARGE SEWAGE EFFLUENT UNDER STORM OR EMERGENCY CONDITIONS BY DWR CYMRU CYF FROM DYFFRYN ARDUDWY WWTW, ACCESS ROAD OFF FFORD YR ORSAF, DYFFRYN ARDUDWY, GWYNEDD, LL44 2HA
APPLICATION NO: CG0043702**

I append a copy of the application for consent to discharge received from Dwr Cymru Cyf and Appendix 11. If you have any comments regarding this application could you please respond by 5th January 2004.

Yours sincerely

Kelvin Graham
Team Leader Customer Contact & Authorisations

Please ask for Ruth Prichard ext 4502

Asiantaeth yr Amgylchedd Cymru
Ffordd Caer, Bwcle, Sir y Fflint CH7 3AJ
Ffôn 01244 550124 Ffacs 01244 550144

Environment Agency Wales
Chester Road, Buckley, Flintshire CH7 3AJ
Tel 01244 550124 Fax 01244 550144





ASiantaeth yr
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES

Eich cyf/Your ref.

Ein cyf/Our ref. DR/RP/CG0043702

Dyddiad/Date: 21st December 2003

Lucy Kay
CCW,
Lys y Bont,
Parc Menai,
Bangor
LL57 2AJ

COPY

Dear Ms Kay,

**WATER RESOURCES ACT 1991, SCHEDULE 10 (AS AMENDED BY THE ENVIRONMENT ACT 1995): FORMAL CONSULTATION. APPLICATION FOR CONSENT TO DISCHARGE SEWAGE EFFLUENT UNDER STORM OR EMERGENCY CONDITIONS BY DWR CYMRU CYF FROM DYFFRYN ARDUDWY WWTW, ACCESS ROAD OFF FFORD YR ORSAF, DYFFRYN ARDUDWY, GWYNEDD, LL44 2HA
APPLICATION NO: CG0043702**

I append a copy of the application for consent to discharge received from Dwr Cymru Cyf and Appendix 11. If you have any comments regarding this application could you please respond by 5th January 2004.

Yours sincerely

Kelvin Graham
Team Leader Customer Contact & Authorisations

Please ask for Ruth Prichard ext 4502

Asiantaeth yr Amgylchedd Cymru
Flordd Caer, Bwcle, Sir y Flunt CH7 3AJ
Ffon 01244 550124 Ffacs 01244 550144

Environment Agency Wales
Chester Road, Buckley, Flintshire CH7 3AJ
Tel 01244 550124 Fax 01244 550144



APPENDIX 11

Form HR01: Proforma for new applications within Stage 2 criteria.



**ENVIRONMENT
AGENCY**

Environment Agency Record of Assessment of Likely Significant Effect On A European Site (Stage 2)

The new application for a please fill in details detailed below is within the Stage I criteria of please fill in details, and in order to progress the application a Stage 2 assessment and consultation with EN/CCW is required.

PART A

To be completed by relevant technical/project officer in consultation with Conservation/Ecology section and EN/CCW

1. Type of permission/activity:	Water Resources Act (1991) (as amended by Environment Act 1995) consent to discharge
2. Agency reference no:	CG0043702
3. National Grid reference:	SH 57723 23637
4. Site reference:	Dyffryn Ardudwy WwTW Access Road Off Fford Yr Orsaf Dyffryn Ardudwy Gwynedd LL44 2HA
5. Brief description of proposal:	Variation to improve the Dyffryn Ardudwy WwTW Scheme under AMP3 improvements
6. European site name(s) and status:	Pen Llyn a'r Sarnau / Llyn Peninsula and the Sarnau, cSAC Morfa Dyffryn SSSI
7. List of interest features:	1.12 Estuarine and intertidal habitats 1.13 Submerged marine habitats 1.10 Coastal lagoons 2.11 Coastal plants 2.12 Marine mammals
8. Is the proposal directly connected with or necessary to the management of the site for nature conservation?	No
9. What potential hazards are likely to affect the interest features? (Refer to relevant sensitivity matrix and only include those to which the interest features are sensitive). Are the interest features potentially exposed to the hazard?	

Sensitive Interest Feature:	Potential hazard:	Potential exposure to hazard and mechanism of effect/impact if known:
Estuaries and intertidal habitats Estuaries	A, b, d, e, f, g, h	
Submerged marine habitats Reefs Sandbanks which are slightly covered by sea water all the time Submerged or partially submerged sea caves Salicornia and other annuals colonising mud and sand	A, b, d, e, g, h	
Coastal habitats Coastal lagoons Large shallow inlets and bays Mudflats and sandflats not covered by seawater at low tide	N/a	
Coastal plants Atlantic salt meadows	N/a	
Marine mammals <i>Halichoerus grypus</i> – Grey seal <i>Tursiops truncatus</i> – Bottlenose dolphin	A, e, g	
Key: - A – Toxic contamination B – Nutrient enrichment C – pH changes D – Changes in salinity regime E – changes to thermal regime F – Physical damage G – Turbidity H - Siltation		

10. Is the potential scale or magnitude of any effect likely to be significant?

a) Alone? (explain conclusion, e.g. in relation to de minimus criteria)	No
b) In combination with other plans or projects? (Explain conclusion and which plans/projects have been included, including those associated with other functions).	No

<p>11. Conclusion: Is the proposal likely to have a significant effect 'alone or in combination' on a European site? (justification – attach any relevant supporting information)</p>	No –	
<p>12. Name of EA Officer:</p>	Karen Owen (Ext4584)	Date: 23/12/03
<p>13. EN/CCW comment on assessment:</p>	<p><i>Agree with EA assessment</i></p>	
<p>14. Name of EN/CCW Officer:</p>	<p><i>Kona Walker</i></p>	<p>Date: <i>13/1/04</i></p>
<p>IF THE PROPOSAL IS LIKELY TO HAVE A SIGNIFICANT EFFECT AN APPROPRIATE ASSESSMENT WILL BE REQUIRED (see part B for suggested scope).</p>		

Part B - SUGGESTED SCOPE OF THE APPROPRIATE ASSESSMENT

-

15. EN/CCW Comment on scope of appropriate assessment:

16. Name of EN/CCW Officer:

Date:



ASiantaeth Yr
AMGYLCHEDD
ENVIRONMENT
AGENCY

WATER RESOURCES ACT 1991 (schedule 10)

(as amended by the Environment Act 1995)

Application for ~~new consent~~/variation to an existing consent* to discharge

(* delete as appropriate)

Regional/Area Address: Discharge Consent Applications Environment Agency Wales Chester Road Buckley Flintshire CH7 3AJ	<i>Official Use Only</i> <i>Dist/Area Ref:</i> <i>Application No.</i> CG 0043702 <i>Date Received:</i> 24/11/03 <i>Fee Received:</i> 24/11/03
---	---

Each applicant must complete the main form and may need to complete a separate annexe if appropriate. Please look through the form and read the notes carefully before you complete it. Processing of your application will be aided by full and accurate completion of all relevant sections and provisions of the necessary plans. If you have any queries regarding the form please contact the person given in the notes.

NOTE:

All information contained within this application will be made available on the public register unless there is a request to withhold any of it. Any such request should provide a full justification stating why the information needs to be withheld (see note xiii).

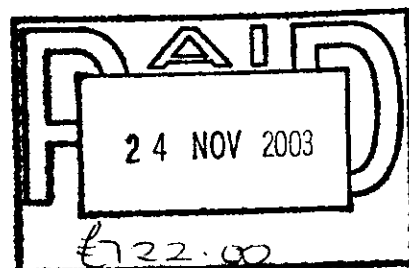
1 SITE ADDRESS

1.1 Address or other sufficient description of land or premises to which this application applies.

Dyffryn Ardudwy WwTW
Access road off Fford yr Orsaf
Dyffryn Ardudwy
Gwynedd

Post Code:

LL44 2HA



2 DETAILS OF DISCHARGE(S)

2.1 State the nature of the discharge(s) (see note i and ii) - tick one or more boxes as appropriate:

- Sewage Effluent - volume of 5 cubic metres per day or less
- Sewage Effluent - volume greater than 5 cubic metres per day (**complete annexe 1**)
- Sewage Effluent discharged under storm or emergency conditions (**complete annexe 2**)
- Cooling Water (**complete annexe 3**)
- Trade Effluent (*including site drainage*) (**complete annexe 3**)
- Others (*please specify*)

2.2 Please state the maximum quantity it is proposed to discharge in any one day

Briefly state how this figure was calculated (see note ii).

2.3 a) Indicate proposed means of discharge - tick as appropriate and show on plan: (for 1, 2 & 3 please state dimensions below)

- | | | |
|---|--------------------------------------|---|
| 1. Pipe <input checked="" type="checkbox"/> | 4. Borehole <input type="checkbox"/> | 7. Sub-Irrigation System <input type="checkbox"/> |
| 2. Channel <input type="checkbox"/> | 5. Well <input type="checkbox"/> | 8. Combination of 6 & 7 <input type="checkbox"/> |
| 3. Culvert <input type="checkbox"/> | 6. Soakaway <input type="checkbox"/> | 9. Other (<i>please specify below</i>) <input type="checkbox"/> |

b) National Grid Reference(s) of point(s) of discharge (see note iii).

S	H	5	7	7	2	3	2	3	6	3	7
---	---	---	---	---	---	---	---	---	---	---	---

(please indicate on accompanying plans)

2.4 a) The Agency will normally require adequate provision for the taking of samples of the discharge in a safe and convenient manner at any time. Please indicate the means proposed (see note iv) - tick as appropriate and show on plan:

- At the outlet At a manhole or sampling chamber

Other (*please specify*)

b) National Grid Reference(s) of sampling point(s) (if different from 2.3 b) above).

S	H	5	7	8	8	8	2	3	6	2	1
---	---	---	---	---	---	---	---	---	---	---	---

(please indicate on accompanying plans)

c) What flow measurement facilities will be provided (see note v)? Please give details.

2.5 a) Type of Treatment Plant(s) to be used (*please specify make and model*) - tick as appropriate:

- Septic Tank Package Sewage Treatment Works Other

b) Will the treatment process involve the use of any chemicals (eg ferric salts, polyelectrolytes). If yes please give details. Y/N

No chemical addition to storm water. Storm overflow weir is upstream of the point where ferric chloride will be dosed to enhance primary settlement tank performance

2.6 a) On what date do you anticipate the discharge will commence?

b) If you require the consent for a limited time period please give dates: from:

to:

c) If the discharge is not continuous please detail the period/circumstances when it will occur.

When storm tanks are full and flow exceeds 25.9 l/s

2.7 a) Are there any existing consents for discharges from the premises (see note vi)? Y/N

If yes, please give the reference numbers (Any further information should be given in Section 5.3).

Storm sewage is discharged under consent reference number CG 0043702 dated 26/4/82

b) Has any person had a Prohibition Notice serviced on them in respect of this site? Y/N
If yes, please give the reference number.

3 SITE DETAILS

3.1 Please give the name of the relevant Planning Authority.

Gwynedd County Council

3.2 Please give details of the premises - tick as appropriate:

- | | | | |
|---|--------------------------|----------------------------|-------------------------------------|
| 1. Single Dwelling | <input type="checkbox"/> | 6. Fish Farm | <input type="checkbox"/> |
| 2. Multiple Dwellings | <input type="checkbox"/> | 7. Mineral Workings | <input type="checkbox"/> |
| 3. Industrial Premises | <input type="checkbox"/> | 8. Water Services plc STW | <input checked="" type="checkbox"/> |
| 4. Vehicle Parking Area | <input type="checkbox"/> | 9. Water Supply | <input type="checkbox"/> |
| 5. Commercial Premises (please specify) | <input type="checkbox"/> | 10. Other (please specify) | <input type="checkbox"/> |

3.3 Please indicate source of the water supply - tick as appropriate:

- | | | | |
|---|-------------------------------------|---|--------------------------|
| 1. Well | <input type="checkbox"/> | 5. River (please give name below) | <input type="checkbox"/> |
| 2. Borehole | <input type="checkbox"/> | 6. Estuary (please give name below) | <input type="checkbox"/> |
| 3. Precipitation (eg rain or snow) | <input type="checkbox"/> | 7. Coastal Water (please give name below) | <input type="checkbox"/> |
| 4. Mains (please state water supply company) | <input checked="" type="checkbox"/> | <input type="text"/> | |
| <input type="text" value="Dwr Cymru Welsh Water (DCWW)"/> | | | |

4 DETAILS OF RECEIVING ENVIRONMENT

4.1 Receiving Medium - tick the category(s) to which the proposed discharge(s) is(are) to be made:

- | | | | |
|--|-------------------------------------|---------------------------------|--------------------------|
| 1. Estuarial Water (tidal river or stream) | <input checked="" type="checkbox"/> | 5. Into Land | <input type="checkbox"/> |
| 2. River or Stream (non-tidal) | <input type="checkbox"/> | 6. Onto Land | <input type="checkbox"/> |
| 3. Canal | <input type="checkbox"/> | 7. Directly into Groundwater | <input type="checkbox"/> |
| 4. Lake, Lock or Pond | <input type="checkbox"/> | 8. Coastal Water (see note vii) | <input type="checkbox"/> |

State name of receiving water if known:

4.2 In the case of sub-irrigation systems, soakaways or boreholes: **Not Applicable**

- (a) Is any part of the system within 5 metres of the boundary of the premises?
- (b) Is any part of the system within 10 metres of a watercourse?
- (c) Is any part of the system within 50 metres of a borehole or spring?
- (d) For wells and boreholes state dimension(s) in metres.
- (e) For sub-irrigation systems, soakaway pits, wells and boreholes, state maximum depth in metres.
- (f) For boreholes, state details of lining in metres:
- | | |
|------------------------------------|------------------------------------|
| (i) Depth of lining | <input type="text" value="N/A m"/> |
| (ii) Depth of perforated lining | <input type="text" value="N/A m"/> |
| (iii) Depth of unperforated lining | <input type="text" value="N/A m"/> |
- (g) A percolation test must be carried out in accordance with British Standard BS6297:1983.
Have the results been provided?

4.3 Is there a foul sewer available to which the discharge(s) could be made (see note viii)?

If yes, please give the reasons it is not practical to connect to it (eg distance, flow etc).

5 DETAILS OF APPLICANT AND OTHER INFORMATION

5.1 (See general notes and note ix)

(a) Full name and postal address of applicant. This should be the person who will become the consent holder should consent be issued.

*Dwr Cymru Cyf

*Pentwyn Road

*Nelson

*Treharris

*Mid Glamorgan

*

Post Code: CF46 6LY

Daytime Telephone Number:

Company Registration Number (if appropriate): 2366777

(b) Agent (if any) - Full name and postal address.

*

*

*

*

*

*

Post Code:

Contact Name and Daytime Telephone Number:

5.2

Please give full name and address to which bills should be sent if different to that given above:

*

*

*

*

*

*

Post Code:

Daytime Telephone Number:

5.3 Are there any other factors to be taken into account? Please continue on a separate sheet if necessary.

DECLARATION

I/We:

1. apply under the Water Resources Act 1991 (as amended by the Environment Act 1995) for consent to discharge, as described in this Application. "This Application" means this page, all the other pages of this form and any attached annexes, the attached plan(s), any other sheets attached, and any other written information supplied to support the application.
2. enclose the required application fee, payable to the Environmental Agency (see note x).
3. enclose 3 copies of the plan(s) and location maps with all relevant information clearly marked (see note xi).
4. will pay required advertising costs (see note xii).
5. confirm that I/we* will notify the Environment Agency of any changes in the information in this application which might be material to the continuation of the consent.
6. confirm that the information given in this application and any questions which the Environment Agency may have about it is/will* be true to the best of my/our* knowledge, information and belief and am/are* not aware of any other facts or information which might affect the granting of a consent, or conditions which might be put on it (see note xiii).
7. confirm that I/we* will pay any annual charges due should a consent be granted ~~YES/NO~~*. If no please indicate who will be completing section 5.2 above (see note xiv).

(* Delete as appropriate)

SIGNED: <i>J. P. Edwards</i>	PRINT NAME: <i>J. P. Edwards</i>
ON BEHALF OF:DWR CYMRU CYF.....	DATED: <i>20/11/03</i>

CONFIDENTIALITY

I/we apply for commercial confidentiality and enclose a full written justification (see note xv).

SIGNED:	DATED:
---------------	--------------

PLEASE RETURN THIS FORM TO THE ADDRESS GIVEN ON THE FRONT PAGE

5. Overflow settings

- | | |
|--|----------|
| a) Overflow setting to storm tanks | 25.9 l/s |
| b) Maximum flow to storm tanks | 42.7 l/s |
| c) Overflow setting to storm sewage overflow | N/A l/s |
| d) Maximum flow to storm sewage overflow | N/A l/s |

6. Storage capacity

- | | |
|--|----------------------|
| a) Volume of Storm tanks | 186.5 m ³ |
| b) Retention time of storm tanks at maximum flow | 2 hours at FFT |
| c) Storage capacity of sewer/wet well | N/A m ³ |

7. Please provide full details of the design criteria that have been used to support this application.

Refer to Dyffryn Arduwy Supporting Document dated November 2003

8. Will facilities be provided to raise alarms (eg telemetry)?

Y/N

If yes, please give details.

Level transmitters will be provided in the three storm tanks to initiate an alarm condition on high water level

9. Will facilities be provided to prevent the discharge of gross solids?

Y/N

If yes, please give details (for screens give bar spacing or aperture).

All flows to treatment pass a 6 mm screen with bypass to storm passing a 10 mm screen

10. What provisions will be made to deal with:

a) power failure (eg standby generators)?

Permanent stand-by power generation is not provided. Facility exists to allow portable equipment to be connected if required

b) mechanical breakdown (eg standby pumps)?

N/A

c) rising main failure?

N/A

d) tanker access?

Yes, via access road

Notes (see also the notes on the main form):

Full details of the design criteria must be provided in order for the application to be determined. If you have any queries about what information is required please contact the person given in notes attached to the main form.



ANNEXE 3 TRADE EFFLUENT DISCHARGES

Please complete this annexe if you are proposing to make a discharge trade effluent (this includes site drainage).

Official Use Only
Application No.

1. Site Name.

Dyffryn Ardudwy WwTW

2. a) Describe in full the trade effluent and the process(es) from which it arises.

The consented trade effluent arises from :-

- Caravan park No 1 (24 m³/day) - backwashing of swimming pool filters – 2 m³/day (allowance)
- Caravan park No 2 (24 m³/day) - backwashing of swimming pool filters – 2 m³/day (allowance)
- Garage - Motor vehicle washing - 1 m³/day

b) Please state the type and number of treatment units you are proposing to use (*if site drainage please include details of oil/petrol interception facilities*).

n/a

3. Rainfall Dependent Discharges

Not Applicable

a) Is the volume going to be rainfall dependent?

Y/N

b) If yes, please give the total area drained.

N/A m²

c) Please give details of any activities which occur in the drainage area which could contaminate surface water (see note b)

N/A

4. Rainfall Independent Discharges

a) What is the maximum rate of discharge?

N/A l/s

b) What is the average daily flow?

N/A m³/d

c) For discharges where the source of supply is other than mains water:

i) give the abstraction licence number

N/A

ii) give the National Grid Reference of a point where the influent can be sampled.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

(please mark on the plan)

5. a) Will any self monitoring take place? Y/N
If yes, please give details

Discharges are controlled through trade effluent discharge legislation within the Water Industry Act and are monitored regularly by trade effluent staff for monitoring and charging purposes.

- b) Will automatic sampling equipment be provided? Y/N
If yes, please give details of type, frequency and location (*please indicate on plan*)

6. a) Please state the maximum temperature in degrees Celsius of the effluent when discharged if different from ambient.

n/a

- b) Will the discharge be monitored for temperature? Y/N
If yes, please give details of type and location (*please indicate on plan*)

7. Has an application for Authorisation been made for a 'prescribed process' as defined in Part I of the Environmental Protection Act 1990? Y/N

If yes, please complete the following:

- a) The application reference.

n/a

- b) Contact name of case officer.

n/a

8. a) Please indicate if any of the specified substances given below or their compounds will be present in the effluent and if so at what maximum concentration (please give values in micrograms per litre - ug/l). Please see note c.

SUBSTANCE	CONCENTRATION (ug/l)			SUBSTANCE	CONCENTRATION (ug/l)		
	Max	Min	Mean		Max	Min	Mean
Iron				Lead			
Arsenic				Malathion			
Atrazine				Mercury			
Azinphos-ethyl				Nickel			
Azinphos-methyl				PCB's			
Boron				PCSD's			
Cadmium				Parathion			
Carbon tetrachloride				Parathion-methyl			
Chloroform				Pentachlorophenol (PCP)			
Chromium				Perchloroethylene			
Copper				Permethrin			
Cyanide				pH <5.5 or >9.0			
Cyfluthrin				Phosphorus			
DDT				Polychlorinated biphenyls			
1,2 Dichloroethane				Simazine			
Dichlorovos				Sulcofuron			
Dioxins				Tetrachloroethylene			
Drins (eg Aldrin, Dieldrin)				Tributyltin compounds			
Endosulfan				Trichlorobenzene			
Fenitrothion				Trichloroethane			
Fenthion				Trichloroethylene			
Flucifuron				Trifluralin			
Hexachlorobenzene (HCB)				Triphenyltin compounds			
Hexachlorobutadiene (HCBd)				Vanadium			
Hexachlorocyclohexanes (HCH's)				Zinc			

- b) Are there any other significant chemical components used on site which may be contained in the effluent, including biocides or additives? N
 If yes, please give details.

No. No change in discharges have been observed or declared by the traders and normal determinands are suite analysed. None of the above substances are known to be present and there are no known red or grey list chemicals in the trade discharges disposed of by Dyffryn Ardudwy WwTW.

Notes (see also the notes attached to the main form):

- a) For direct trade effluent discharges, full details of the type of the effluent are required (eg cooling water from air conditioning units), along with typical analytical details and the results of any toxicity studies on the effluent or its constituents. In certain circumstances the Agency may require that specific samples be taken and tests and analysis carried out. The Agency is empowered to recover any costs incurred as a result of special studies.*
- b) Possible sources of contamination include oil/chemical storage areas, vehicle loading/unloading areas, heavy vehicle parking areas and oil/petrol filling points. Any other potential sources of contamination should be detailed.*
- c) Where discharges of trade effluent take place to a sewerage system, as covered by this application, please give details of all authorised discharges of substances listed in table 8 overleaf.*



ANNEXE 4
WELSH REGION SUPPLEMENTARY INFORMATION ANNEXE

Please complete this annexe for every proposed discharge.

Official Use Only
Application No.

For all proposed discharges:

1. Site Name.

Dyffryn Ardudwy WwTW

2. Is this application being made to reinstate a lapsed Consent?

Y/N

If so, please state the Number of the lapsed Consent:

IMPORTANT: If you are in need of advice on either part of Question 2, please contact the Agency Regional Consents Section on 01222 770088.

3. If the proposed discharge is to be made down a pipe, channel or culvert (as given in Section 2.3 of the main application form), please state the diameter (including units):

Pipe 12 inch diameter is existing

4. Please indicate the anticipated cost of the proposed scheme, including any alternatives which may have been considered:

Approx. £390,000

This is for the installation of ferric dosing system with associated safety equipment, a new inlet screen (6mm) designed to pass all flows up to 6DWF with screenings collection and conditioning, recommissioning two disused storm tanks and automating the biological filter recirculation facility plus provision of new storm screen. These are essential improvements and no alternative options exist.

5. Is there any trade effluent component in the proposed discharge?

Y/N

If yes, please confirm here that you have completed and enclosed Annex 3:

Tick

✓

6. Will the proposed discharge be pumped or made under gravity? (please circle) Pumped / Gravity

If pumped, please state the maximum pump rate in l/sec:

-N/A #s

For proposed discharges of sewage in storm or emergency conditions:

7. Please confirm here that you have completed and enclosed both Annexes 1 and 2:
Only Annex 2 is applicable to a Stormwater Consent application

Tick

N/A

8. Please state:

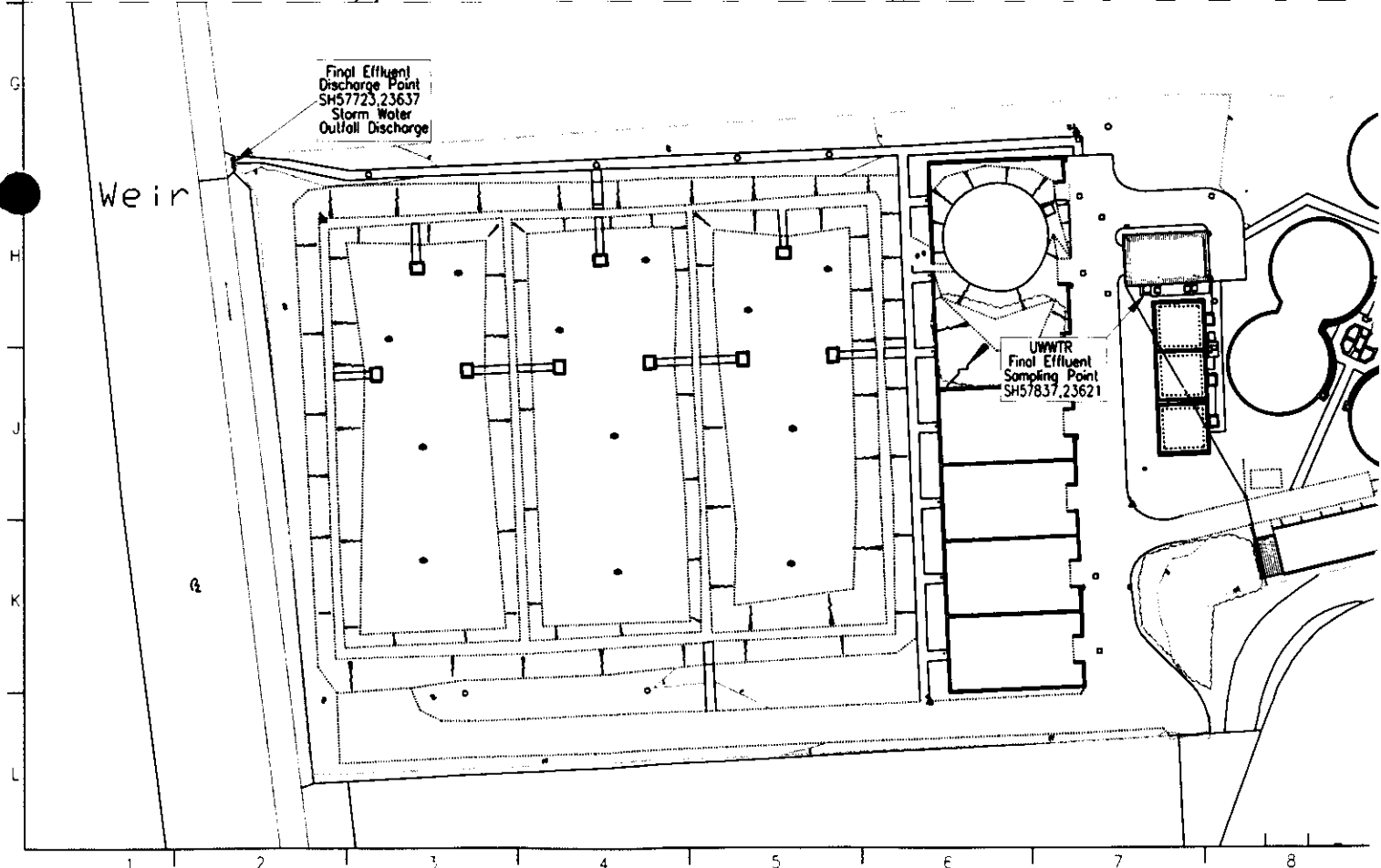
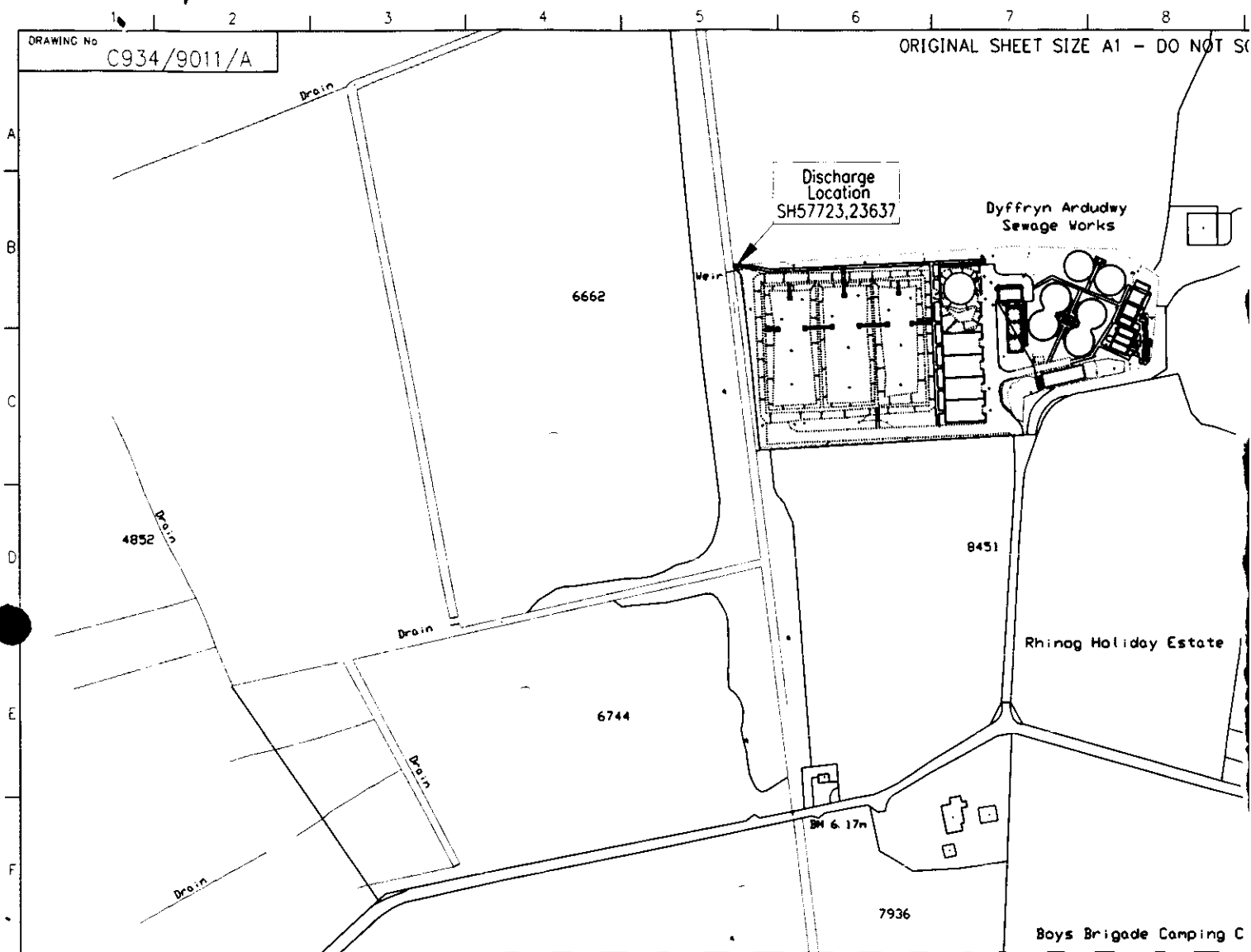
Population served (head)	1667 (resident) 3021 (holiday home occupants)
Consumption (l/head/day) default = 180	180 (resident) 120 (static caravan)
Infiltration (m ³ /day)	241.92
Industrial effluent flow (m ³ /day)	5 (allowance for backwashing swimming pool filters and vehicle washing at garage)
Dry Weather Flow (m ³ /day)	909.53
Soc A (l/sec)	68.6
Predicted spill frequency (per annum)	Not known as storm tank not modelled, but less than current owing to storm water storage increased from 61.5 m ³ to 186.5 m ³

IMPORTANT NOTES FOR ALL CONSENT APPLICATIONS:

1. **Whoever signs the declaration on the main application form takes responsibility for the discharge, and will become the registered consent holder, if consent is given. In the case of a 'body corporate' (eg a public limited company ('plc'), limited, company, local authority), the 'body corporate' will be the registered consent holder, and the person with the delegated authority to sign on behalf of the 'body corporate' should give their job title.**
2. **Agents making an application on behalf of a client, must attach their clients written authority.**
3. **If the name and/or address of the applicant changes after submission of this application to the Environment Agency, the applicant must inform the Agency in writing.**

DRAWING No C934/9011/A

ORIGINAL SHEET SIZE A1 - DO NOT SCALE





DŴR CYMRU
WELSH WATER

Welsh Water
ALLIANCE



CYNGHRAIR
Dŵr Cymru

Improvements in Quality of Wastewater Treatment at Dyffryn Ardudwy WwTW

Supporting Data Report

November 2003

To be read in conjunction with Consent
Application

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Appendices

Derivation of Design Flowrates

H&M Ltd Flow and Load Survey Report (August 2003) Extract

Process Flow Diagram

Site layout plan and outfall location diagram (pdf file)

List of Tables and Graphs

Table 1	Average & Max Daily Influent Flowrates and Rainfall Data
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Graph 1	Daily Influent flow vs. rainfall

1 INTRODUCTION

1.1 Background

Dwr Cymru Welsh Waters (DCWW) AMP 3 investment programme includes improvements at Dyffryn Ardudwy WwTW to comply with more stringent discharge consent limits in Year 5. Current consent and future indicative consent conditions for final effluent are as follows:

	Current	Indicative Future	
		Lower tier	Upper tier
BOD mg.l ⁻¹	85	13	50
SS mg.l ⁻¹	120	20	80

Over the period 2000 to 2002 the works has not failed the current consent on any occasion. The three-year mean value for each determinand are:

	BOD mg/l	SS mg/l
Mean Value	11.4	18.5

Over the period 2000 to 2002 the works would have failed its indicative future consent for BOD on 8 occasions and on 9 occasions for the SS indicative consent. The works risks failing its future indicative consent due to high soluble BOD loads in the summer months. It is likely that the biological filter media may be organically overloaded. Proposed improvements listed in 1.2 below are designed to enhance the operational efficiency of the treatment works. Currently the main issues associated with the works are:-

- Potential risk of failing to achieve the future indicative consent limits during summer months when BOD and Suspended Solids loads on the treatment process is greatly increased
- Use of a macerator at the inlet works contributes to potential settlability problems in the primary settlement tanks.
- Possible inadequate wetting of biological filter media
- Storm flows are unscreened

1.2 Scope of Work

The proposed scope of works is as follows:

1. Provide a chemical dosing system to inject ferric salt into the treatment process upstream of the primary settlement tanks during summer months to reduce the Suspended Solids (and BOD load) on the biological filters

2. Provide a new 6mm screen at inlet works sized for 6DWF, to replace the macerator
3. Automate the recirculation facility on the biological filters
4. Upgrade flow monitoring at the works to comply with EA requirements
5. Re-commission two disused storm tanks to increase the storm water storage capacity to comply with AMP 2 guideline requirements of 2h @FFT and provide level detection in each tank
6. Provide a new storm water sample chamber

HYDRAULIC INFORMATION AND BASIS OF DESIGN

2.1 Dry Weather Flow

To provide data for the works a two-week flow and load survey was commissioned and undertaken by H&M Environmental Limited. The survey period was from the 15th August to 28th of August 2003. The survey average for the 14 days was 10.52 l/s (909.07 m³/day – Appendix Table1). The calculated DWF based on an observed infiltration and known resident/holidaymaker population is 909.53 m³/day. For design purposes a dry weather flow of 909.53 m³/day has been used. This figure is supported by DCWW correspondence indicating a future DWF of approximately 900 m³/day, being indicative of the DWF for this works (file BRN/SAK/N2344 dated 15/1/82). This correspondence is dated 1982, around which time large numbers of caravans/holiday homes were connected to the public sewer. Relatively little future development is anticipated to occur within the catchment in the near future.

2.2 Population Served

1. Flow and Load Survey results

Population determined on the basis of a flow and load survey revealed a population figure of 9467 persons, derived from the BOD load of 568 kg/d and a contribution of 60g/hd/day – Appendix Tables 2/3 for the day of lowest daily influent flow (27/8/03). The catchment is subject to a large tourist influx and this is indicated by the variation in BOD load reported in Appendix Table 3.

2. Sewerage Treatment Asset Management (STAM)

From the STAM database the resident population is given as 1194, non-residents are 8297 and consented trade effluent equivalent population of 13. This gives a design PE of 9504 for the catchment.

3. Census Data

As a check on population the Gwynedd County Council website was accessed which provided a resident population of 1489. 2001 census data gives a resident population of 1667. This figure may include residents outside of the catchment as it is based on electoral ward information.

4. Dwr Cymru's AIS system

To obtain further evidence of resident population a catchment boundary was assessed. Use was made of Dwr Cymru's AIS system. The sewerage catchment area was identified on the system and a boundary drawn around the properties connected to the sewer. Using this system the number of properties was identified and then multiplied by 2.4 to give an estimate of population. Using the property count figure of 732 less 47 retail outlets gave a property count of 685. Applying the default figure of 2.4 persons per property gave a resident population of 1644.

For design purposes a resident population of 1667 persons has been used and is a conservative figure.

Summer Visitor Population

Dyffryn Ardudwy treatment works is subject to a very large tourist input during the summer months with several holiday village and caravan/camping sites within the catchment boundary. The holiday villages consist of 4, 6 and a few 8-berth caravans at several sites with the following pitch numbers available from internet home page advertising:

- Site 1 Dyffryn Seaside Estate - 248 static caravans
- Site 2 Sunnysands caravan Park - 450 static caravans
- Site 3 Barmouth Bay Holiday Village - 260 static caravans
- Site 4 Islawfordd Caravan Park - 216 static caravans
- Site 5 Rhinog Holiday Park - 25 chalet + 12 static caravans
- Site 6 Rowen Caravan Park - 31 static caravans
- Site 7 Old Mill Caravan Park - 7 static caravans
- Site 8 Sarnfaen Caravan Park - 95 static caravans
- Site 9 Moelfre View Caravan Site - 85 static caravans
- Site 10 Parc Caerelwan - 52 static caravans

Total = 1481 static caravans.

There were several sites that advertised touring pitches on associated web pages, which were subsequently discounted following a site visit 7/11/03. Most of the sites, which previously catered for a touring population, displayed signs that touring caravans and tents were no longer catered for, and so for this reason were not included in the design flow calculations in the appendix.

To determine the extent of the holiday visitor numbers, the static caravan numbers were multiplied by an occupation rate of 2.4, this figure is appropriate for a range of caravan types on sites that catered strictly for family units. One of the managers of a larger site indicated that even during the peak holiday weekends not all of the holiday homes were occupied, although exact figures were not available. For this reason the flow calculations have been based on a residency factor of 85% for all sites. For design purposes a static holiday population of 3021 persons has been used. The EA default value of 180 l/hd/day has been applied in calculation of FFT and Soc A when considering the resident population, whilst 120 l/hd/day has been used for occupants of holiday homes. To help confirm the consumption rate of the holiday population, clean water meter data was obtained, however, the supply system associated with each of three separate meters extended considerably beyond the catchment and as such would have included residents from neighbouring villages.

2.3 Infiltration

Infiltration used in the model is based on the recorded infiltration obtained during the H&M Environmental Ltd. survey – *Table 4*. This figure was obtained from the lowest average flow figures for each day of the survey during the hours of 01:00 to 05:00. The lowest average value was taken for each day and averaged across the whole survey period to give a value of 2.77 l/s. It was considered appropriate to take the averaged lowest nighttime flow figure for each day because this value was itself derived from one hour of readings taken every two minutes i.e. 30 individual readings providing the average value. For design purposes the observed infiltration was taken to be 241.92 m³.d⁻¹ (2.8 l.s⁻¹).

2.4 Trade Effluent

There are three consented traders in the catchment of Dyffryn Ardudwy WwTW. These are:-

- Sarnfaen Caravan Park
- Islawrffordd Caravan Park
- Smithy Garage

These three consented traders contribute a total of 49 m³/day.

The consented flow from each of the caravan parks is 24 m³.d⁻¹. However it is thought that the pools would not be emptied completely on a regular basis. In establishing the design flows it is considered more prudent to allow for the daily backwashing of the swimming pool filters. In calculating the design flow 2 m³ per day has been allowed for the release of filter backwash into the public sewer from each of these traders. For this reason the two pools account for 2 m³ each whilst the vehicle washing has been taken as the full consent value of 1 m³. For design purposes the consented trade volume is taken as 5 m³.d⁻¹.

2.5 Catchment / Hydraulic Model

No hydraulic modeling of the Dyffryn Ardudwy catchment has been undertaken.

2.6 Summary of Flow Conditions

Design flows are based on a fixed resident population of 1667 substantiated on the basis of data from the property count using Dwr Cymru AIS database, data obtained from Gwynedd County Council web page and census data. The DWF of 909.53 m³/day has been substantiated by the flow and load survey results. Detailed design flow calculations are presented in the Appendix. A summary of design flow conditions for Dyffryn Ardudwy WwTW is presented in the following table.

Design flow conditions – Dyffryn Ardudwy WwTW

Description	Observed/Derived Flows		Current consent condition
	m ³ /d	L/s	
DWF	909.53	10.52	749m ³ d ⁻¹ (8.7 l.s ⁻¹)
FFT	2244.75	25.9	2043m ³ d ⁻¹ (23.7 l.s ⁻¹)
Form A	5925.7	68.6	
6DWF	4247.4	49.2	

2.7 Comparison with current flow conditions

There is no telemetry on site, however periodic flow to treatment readings have been recorded manually by the site operator since August 03.

The average flow for recorded by the operator for September and October, which again were very dry months, provide daily flows of 533.66 m³/day which would represent periods when the population present would have been predominantly resident. This value compares very well with the calculated DWF, without the holidaymaker input, of 546.96 m³/d.

3. SCHEME DEFINITION

3.1 Description of Existing Works

A flow diagram of the existing works is presented in Appendix figure 1.

Dyffryn Ardudwy WwTW is located four miles to the north of Barmouth in the county of Gwynedd.

Dyffryn Ardudwy WwTW is a biological treatment works receiving raw sewage of mainly domestic origin from two sources. The first is pumped to a vortex manhole from which it flows by gravity to the works. The second arrives by gravity at the works after being pumped from Tal y Bont and most of the caravan sites. The raw sewage arrives at the works at a common inlet.

Flows in excess of FFT are diverted to the storm tank via an overflow weir. A submersible pump returns storm water to inlet once flows to treatment have subsided. Primary settlement occurs in three tanks fed by a splitter box into which recycled effluent is received to maintain biomass in the biofilters. The biofilters are of stone media type, four of paddle operation and two of siphon operation.

Treated filtered effluent is settled in three humus tanks before discharging to a final effluent chamber and then to outfall in the Ardudwy Marsh Main Drain.

3.2 Limitations of the existing works

Following analysis of the works performance and detailed survey the limitations of the treatment process were identified as follows: -

1. There is no screening at inlet, only comminution, which interferes with the settleability of solids in the primary settlement tanks. As a result there is a potential for a thick scum to form on the surface of the water in the primary tank which must be manually scraped away.
2. Macerated sewage is not suitable for discharge via a storm overflow.
3. The works cannot produce a final effluent quality to comply with the future indicative consent standards. This is a problem associated with the increased population in the catchment during the summer months. The performance of the existing assets needs to be enhanced in order to treat the increased suspended solids and BOD load.
4. The biological filters are provided with recirculation facilities where final effluent is used to maintain the media surface in a wetted condition. However the recirculation system is not automated. Without automation there is a risk of the wetting rate being inadequate to sustain the biomass. If there is insufficient wetting of the filter media there is risk of suspended solids being entrained with filter effluent contributing to high-suspended solids and BOD in the final effluent.

3.3 Improvements to Sewage Treatment at Dyffryn Ardudwy WwTW

1. Provide a new 6mm inlet screen with screenings handling and conditioning installed in the position of the existing macerator. The screen will be self cleaning using final effluent. The screen will be designed to accommodate all flows up to 6DWF (considered due to the large holiday influx as allowed in the AMP 3 guidelines). The treated screenings will be discharged into a skip for removal off site. Flows in excess of FFT will flow through a bypass channel equipped with a 10mm bar screen.
2. Incoming sewage after screening will be pretreated with a flocculent to aid the settlement and removal of suspended solids (and hence BOD) in the primary tanks. The process will use a ferric salt, which will be dosed into the inlet channel just upstream of the splitter box for the primary tanks but downstream of the storm separation. The chemical dosing package will only be used in summer months in order to treat the additional load imposed on the works due to the seasonal influx of visitors.
3. To meet the required storm water storage requirements two disused storm tanks will be re-commissioned to increase storm water storage capacity at the works to 186.5 m³. Each storm tank will be provided with an ultra-sonic level transmitter to monitor level in each tank. A storm water return pump will return storm water to the inlet works at low influent flows. A storm water tank mixer will be provided to maintain solids in suspension.
4. A new flowmeter will be installed at the existing flume, downstream of the storm overflow weir. The flow meter will measure FFT
5. The biological filter recirculation facility will be automated to maintain a constant flowrate through the media.
6. A new storm water sample chamber will be provided.

3.4 Improvements to Stormwater treatment

Currently one storm tank is in use (61.5 m³). Two disused storm tanks will be re-commissioned to satisfy the AMP 2 guideline requirement for 2 hours storage at FFT. Storm flow will be allowed to cascade between tanks, filling each tank in turn before overflowing to the next tank. A storm event monitor will be provided on the outlet of the final tank to monitor the frequency and duration of any storm tank overspill event.

Within the storm tanks mixer pumps will be provided to prevent settlement of solids. A storm return pump will empty the storm tanks, returning storm water to the works inlet channel when flows to treatment have reduced to less than FFT.

4. DISCHARGE CONSENTS

The **current** consent conditions for discharge of treated sewage (CG0043701) from Dyffryn Ardudwy WwTW direct to the Ardudwy Main Drain are:

DWF	$\leq 749 \text{ m}^3/\text{d} (8.6 \text{ l/s})$
Max Rate of Discharge	$\leq 23.7 \text{ l/s}$ $\leq 2043 \text{ m}^3/\text{d}$
BOD	$< 85 \text{ mg/l}$
SS	$\leq 120 \text{ mg/l}$

Proposed Modifications

The **proposed** conditions for discharge from Dyffryn Ardudwy WwTW direct to the Ardudwy Main Drain are:

DWF	$\leq 909.53 \text{ m}^3/\text{d} (10.52/\text{s})$
FFT	$\leq 2244.75 \text{ m}^3/\text{d} (25.9 \text{ l/s})$
6DWF	$\leq 4247.4 \text{ m}^3/\text{d}$ $\leq 49.2 \text{ l/s}$

APPENDIX

Derivation of Flowrates

The formulae provided by The Institution of Water and Environmental Management in the handbook Preliminary Processes Third Edition have been used.

P (residents)	= 1667	P (statics) = 3021
G (residents)	= 180 l/h/d	G (statics) = 120 l/h/d
PG (residents)	= 300.06 m³/d	
PG (holiday makers)	= 362.55 m³/d	
PG (total)	= 662.61 m³/d	

I = 241.92 m³.d⁻¹ (2.8 l/s) measured during H&M Flow and Load survey

E = 5 m³.d⁻¹ allowance made for backwashing of 2 swimming pool filters 2 m³.d⁻¹ (each) plus 1 m³.d⁻¹ for vehicle washing (Garage)

Calculated DWF Including holiday makers:

$$\begin{aligned} &= \text{PG (total population)} + \text{I} + \text{E} \\ &= 662.61 + 241.92 + 5 \\ &= \mathbf{909.53 \text{ m}^3/\text{d}} \end{aligned}$$

$$\begin{aligned} \mathbf{3DWF (FFT)} &= \mathbf{3PG + I + 3E} \\ &= 3(1667 \times 0.18 + 3021 \times 0.12) + 241.92 + 3(5) \\ &= 3(300.06 + 362.55) + 241.92 + 3(5) \\ &= \mathbf{2244.75 \text{ m}^3/\text{d} (25.9 \text{ l/s})} \end{aligned}$$

$$\begin{aligned} \mathbf{6DWF} &= \mathbf{6PG + I + 6E} \\ &= 6(1667 \times 0.18 + 3021 \times 0.12) + 241.92 + 6(5) \\ &= 6(300.06 + 362.55) + 241.92 + 6(5) \\ &= 3975.48 + 241.92 + 30 \text{ m}^3/\text{d} (25.9 \text{ l/s}) \\ &= \mathbf{4247.4 \text{ m}^3/\text{d} (49.2 \text{ l/s})} \end{aligned}$$

To calculate Soc A, an equivalent population is determined which relates to the appropriate consumption rate applied, i.e. resident population taken as 1667 because consumption is 180 l/hd/day. The static population is proportioned to 180 l/hd/d.

Therefore,

the static caravan/holiday home equivalent is	$3021 \times (120/180) = \mathbf{2014 \text{ persons}}$
the total population equivalent is	$1667 + 2014 = \mathbf{3681 \text{ persons}}$

$$\begin{aligned} \mathbf{SOC 'A'} &= \mathbf{DWF + 1.36 P + 2E} \\ &= 909.53 + 1.36(3681) + 10 \text{ m}^3/\text{d} \\ &= 909.53 + 5006.16 + 10 \\ &= \mathbf{5925.7 \text{ m}^3/\text{d} (68.6 \text{ l/s})} \end{aligned}$$

Date	Daily Rainfall (mm)	FFT AVG (L/s)	FFT Daily Max. (L/s)	Total Daily Flow (m ³)
15/08/03	0	10.9	30.7	942
16/08/03	0	10.0	35.8	864
17/08/03	0.4	10.2	31.6	878
18/08/03	0	10.1	34.5	873
19/08/03	0	9.7	29.5	836
20/08/03	0	9.9	30.6	791
21/08/03	0.4	10.7	30.8	924
22/08/03	0.2	12.9	32.9	1116
23/08/03	0	12.9	35	1113
24/08/03	0	12.4	35.3	1073
25/08/03	0	10.8	34	932
26/08/03	0	10.1	30.3	875
27/08/03	0.8	8.6	34.8	740
28/08/03	0	8.9	30.9	770
Period Average	0.1	10.52	32.6	909.07

Table 1: Average and Maximum Daily Flows

M+H Ltd Survey 2002 (Extract)

Day	Time	COD mg/l	BOD mg/l	TSS mg/l	Ammonia
15/08/03	00:01 - 04:00	504	261	166	87
15/08/03	04:01 - 08:00	603	315	185	78
15/08/03	08:01 - 12:00	1643	838	556	98
15/08/03	12:01 - 16:00	1252	657	362	61
15/08/03	16:01 - 20:00	961	469	286	73
15/08/03	20:01 - 24:00	921	451	314	54
16/08/03	00:01 - 04:00	565	274	159	63
16/08/03	04:01 - 08:00	778	380	226	69
16/08/03	08:01 - 12:00	1372	692	493	63
16/08/03	12:01 - 16:00	1348	685	441	63
16/08/03	16:01 - 20:00	1119	565	325	55
16/08/03	20:01 - 24:00	1144	589	386	71
17/08/03	00:01 - 04:00	611	297	547	63
17/08/03	04:01 - 08:00	298	159	141	37
17/08/03	08:01 - 12:00	1266	618	429	70
17/08/03	12:01 - 16:00	1227	615	430	69
17/08/03	16:01 - 20:00	662	348	529	73
17/08/03	20:01 - 24:00	705	362	519	71
18/08/03	00:01 - 04:00	304	147	363	32
18/08/03	04:01 - 08:00	171	82	55	30
18/08/03	08:01 - 12:00	136	71	94	21
18/08/03	12:01 - 16:00	494	253	465	60
18/08/03	16:01 - 20:00	588	288	379	49
18/08/03	20:01 - 24:00	442	232	363	36
22/08/03	00:01 - 04:00	360	169	93	54
22/08/03	04:01 - 08:00	158	83	43	31
22/08/03	08:01 - 12:00	886	453	302	105
22/08/03	12:01 - 16:00	988	507	277	91
22/08/03	16:01 - 20:00	687	352	179	35
22/08/03	20:01 - 24:00	849	433	236	73
23/08/03	00:01 - 04:00	662	340	313	75
23/08/03	04:01 - 08:00	131	70	90	48
23/08/03	08:01 - 12:00	1106	537	359	120
23/08/03	12:01 - 16:00	944	486	426	95
23/08/03	16:01 - 20:00	833	410	307	72
23/08/03	20:01 - 24:00	667	336	359	76
24/08/03	00:01 - 04:00	541	273	149	55
24/08/03	04:01 - 08:00	168	82	98	33
24/08/03	08:01 - 12:00	1147	562	308	90
24/08/03	12:01 - 16:00	863	425	261	88
24/08/03	16:01 - 20:00	925	468	209	77
24/08/03	20:01 - 24:00	742	365	306	77
25/08/03	00:01 - 04:00	620	300	170	81
25/08/03	04:01 - 08:00	703	348	382	67
25/08/03	08:01 - 12:00	699	352	216	82
25/08/03	12:01 - 16:00	1020	515	341	76
25/08/03	16:01 - 20:00	860	433	297	53
25/08/03	20:01 - 24:00	887	426	346	52
Average		762	383	298	66

Table 2: Daily Crude Sewage Concentrations (Intensive Sampling)

Table 3: Crude Sewage Loads

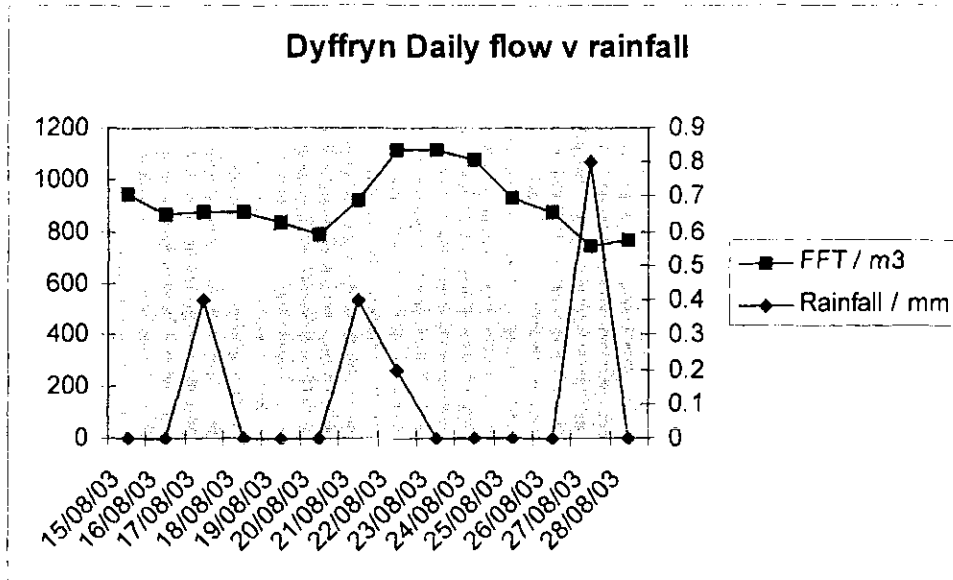
Day	Daily flow m ³	COD kg/day	BOD kg/day	TSS kg/day
15/08/03	942	924	499	294
16/08/03	864	911	531	292
17/08/03	878	698	400	380
18/08/03	873	311	179	250
19/08/03	836	986	514	380
20/08/03	791	639	334	484
21/08/03	924	1168	597	335
22/08/03	1116	605	333	174
23/08/03	1113	808	363	345
24/08/03	1073	814	363	247
25/08/03	932	856	396	313
26/08/03	875	947	496	339
27/08/03	740	1135	568	399
28/08/03	770	1117	553	405
Average	909	851	438	331

Date	Time Period	Average Flow / L/s	Maximum Flow 24:00 - 04:59 / L/s
15/08/03	24:00 - 00:59 01:00 - 01:59 02:00 - 02:59 03:00 - 03:59 04:00 - 04:59	9.4 7.1 4.6 4.7 1.5	30.7 (01:22)
16/08/03	24:00 - 00:59 01:00 - 01:59 02:00 - 02:59 03:00 - 03:59 04:00 - 04:59	11.0 4.8 4.0 4.6 4.0	27.7 (03:18)
17/08/03	24:00 - 00:59 01:00 - 01:59 02:00 - 02:59 03:00 - 03:59 04:00 - 04:59	9.5 4.4 6.8 2.3 5.8	28.6 (00:54)
18/08/03	24:00 - 00:59 01:00 - 01:59 02:00 - 02:59 03:00 - 03:59 04:00 - 04:59	7.5 5.4 5.0 5.2 0.7	27.5 (00:40)
19/08/03	24:00 - 00:59 01:00 - 01:59 02:00 - 02:59 03:00 - 03:59 04:00 - 04:59	12.4 5.7 6.0 3.3 1.6	27.4 (00:40)
20/08/03	24:00 - 00:59 01:00 - 01:59 02:00 - 02:59 03:00 - 03:59 04:00 - 04:59	7.2 7.5 4.3 5.1 5.1	30.6 (04:32)
21/08/03	24:00 - 00:59 01:00 - 01:59 02:00 - 02:59 03:00 - 03:59 04:00 - 04:59	12.8 6.5 5.2 1.1 5.5	26.8 (01:38)
22/08/03	24:00 - 00:59 01:00 - 01:59 02:00 - 02:59 03:00 - 03:59 04:00 - 04:59	13.5 10.3 5.2 6.5 4.3	28.1 (00:16)
23/08/03	24:00 - 00:59 01:00 - 01:59 02:00 - 02:59 03:00 - 03:59 04:00 - 04:59	14.6 9.1 4.4 6.2 5.1	27.2 (04:16)

Table 4: Average & Maximum Night Time Flows

Date	Time Period	Average Flow / L/s	Maximum Flow 24:00 - 04:59 / L/s
24/08/03	24:00 - 00:59 01:00 - 01:59 02:00 - 02:59 03:00 - 03:59 04:00 - 04:59	13.5 9.5 4.2 4.9 4.7	32.2 (00:38)
25/08/03	24:00 - 00:59 01:00 - 01:59 02:00 - 02:59 03:00 - 03:59 04:00 - 04:59	8.7 9.0 3.7 3.0 4.3	32.5 (00:04)
26/08/03	24:00 - 00:59 01:00 - 01:59 02:00 - 02:59 03:00 - 03:59 04:00 - 04:59	7.8 5.4 4.4 5.4 5.1	24.5 (01:08)
27/08/03	24:00 - 00:59 01:00 - 01:59 02:00 - 02:59 03:00 - 03:59 04:00 - 04:59	5.9 7.8 0.9 3.9 4.6	29.5 (01:42)
28/08/03	24:00 - 00:59 01:00 - 01:59 02:00 - 02:59 03:00 - 03:59 04:00 - 04:59	8.2 4.1 3.4 1.4 3.8	26.4 (04:02)

Graph 1: Daily influent flow vs. rainfall





ASiantaeth Yr
Amgylchedd Cymru
ENVIRONMENT
AGENCY WALES

Ein cyf/Our ref: CG0043701/CG0043702

Date: 24th November 2003

COPY

Dwr Cymru Cyf
Pentwyn Road
Nelson
Treharris
Mid Glamorgan
CF46 6LY

Dear Sir/Madam

WATER RESOURCES ACT 1991, SCHEDULE 10 (AS AMENDED BY THE ENVIRONMENT ACT 1995) APPLICATION FOR CONSENT TO DISCHARGE SEWAGE EFFLUENT BY DWR CYMRU CYF FROM DYFFRYN ARDUDWY WWTW ACCESS ROAD OFF FFORD YR ORSAF, DYFFRYN ARDUDWY, GWYNEDD, LL44 2HA

APPLICATION NO: CG0043701/CG0043702

Thank you for your application for consent to discharge together with your application fee of £722 X 2. It is receiving consideration and you will be hearing from us again shortly. Please state application CG0043701/CG0043702 in any correspondence with us relating to this application.

Yours faithfully

Kelvin Graham
Team Leader Customer Contact and Authorisations

Please ask for Ruth Prichard



10/10/10



Water Resources Act 1991
 as amended by the Environment Act 1995
Consent to Discharge
Certificate of Holder



**ENVIRONMENT
 AGENCY**

Part A

To: DWR CYMRU CYFYNGEDIG
 CONSENTS REGULATION OFFICER
 PLAS-Y-FFYNNON
 CAMBRIAN WAY
 BRECON LD3 7HP



The **Environment Agency** ("the Agency") hereby confirm that the above named person is a/the registered holder of consent CG0043701

Nature of Discharge(s); SEWAGE EFF/TREATED EFF/CONTINUOUS
 at DYFFRYN ARDUDWY STW

Note: This certificate should be kept with the consent document for future reference. If you transfer responsibility for the discharge to somebody else you must pass the consent to them and tell the Agency within 21 days. **Responsibility for the consent cannot be disclaimed by the holder but the registration of holder may be transferred to a successor.** To do this please complete the form below, then tear it off and return it to the address shown. If you fail to transfer the consent, even though you are no longer on the site, you may still be liable for prosecution for pollution. If you transfer the consent but do not tell us, you will be committing an offence. In case of any queries please contact your local Environment Agency office.

Part B Please complete in block capitals or type.

To:

Water Resources Act 1991: Notice of transfer of consent to discharge

Consent: Name:
 Address:

I/We* hereby serve notice on the Agency that I/we* am/are* no longer a/the* Holder of the above consent which will be/was* transferred to: * delete as appropriate

Name(s) of new holder(s):
Address:

Post Code:

Date of Transfer to new Holder(s);

Signed:..... **Dated:**.....

Name (block capitals):..... **Position:**.....

(to be completed when signing on behalf of corporate bodies)

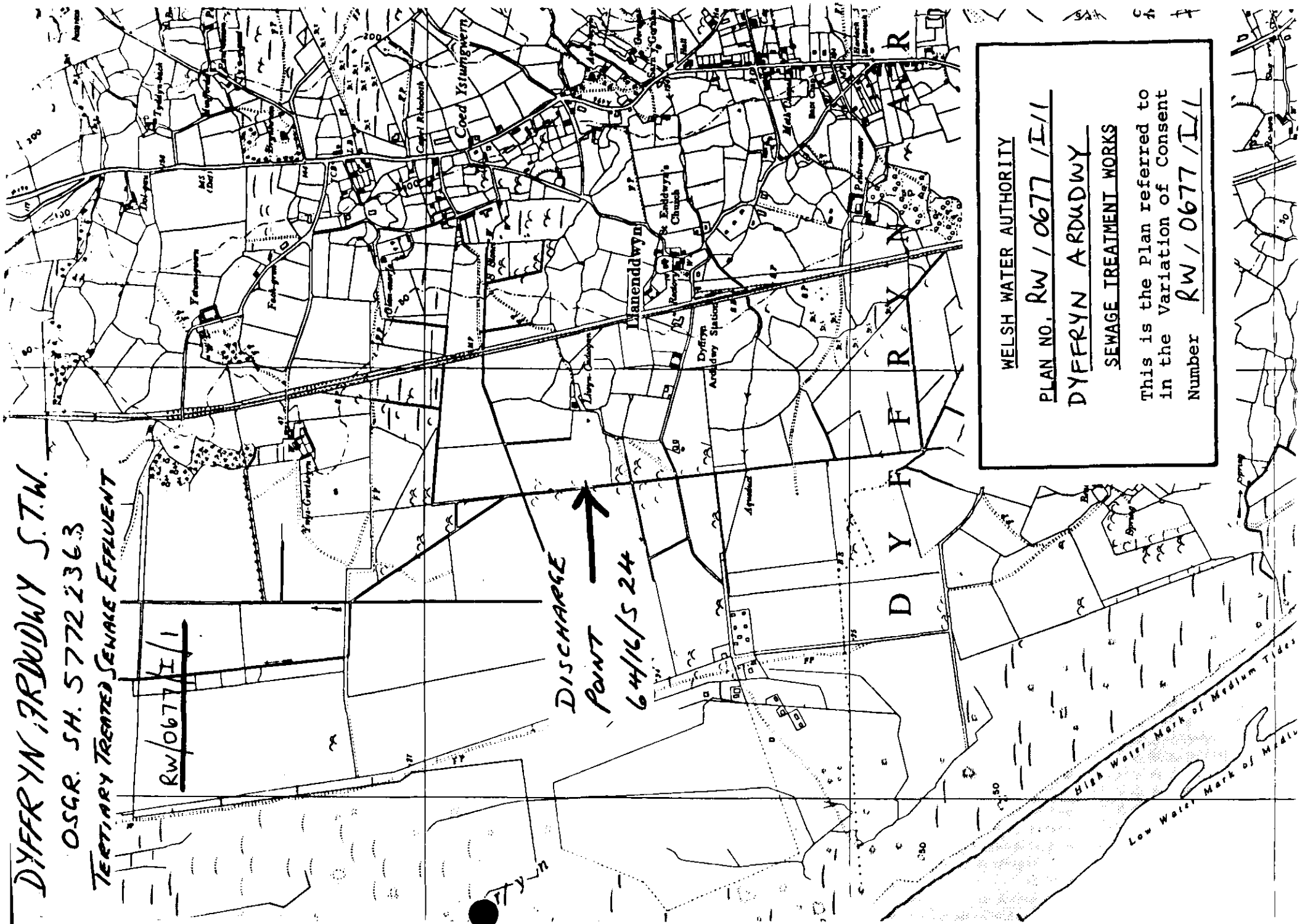


DYFFRYN ARDUDWY S.T.W.

OSGR. SH. 5772 2363

TERTIARY TREATED SEWAGE EFFLUENT

RW/0677/I/1



WELSH WATER AUTHORITY
 PLAN NO. RW / 0677 / I / 1
 DYFFRYN ARDUDWY
 SEWAGE TREATMENT WORKS
 This is the Plan referred to
 in the Variation of Consent
 Number RW / 0677 / I / 1



C.203/11 & S.A./192

23rd September, 1964.

Dear Sir,

Rivers (Prevention of Pollution) Acta 1951 - 1961
Talybont Sewerage and Sewage Disposal Scheme

With reference to your application of the 15th June 1964, as subsequently amended, the Gwynedd River Board, in pursuance of their powers under the above Acts, hereby consent to the bringing into use of a new outlet for the discharge of treated sewage effluent and storm sewage and the making of a new discharge of treated sewage effluent and storm sewage into the Main Drain of the Ardudwy Marsh Internal Drainage District at a point on the right bank in enclosure No. 762 in accordance with the plans numbered 117A/11 and 117A/15 and subject to the following conditions:-

1. The volume of the treated effluent discharged shall not during dry weather exceed 150,000 gallons in any period of 24 hours.
2. The effluent discharged shall not contain any matter to such an extent as to cause the water in the stream to be poisonous or injurious to fish, fish spawn or the food of fish.
3. During such periods when the flow of water in the receiving stream, i.e., the Ardudwy Marsh Internal Drainage District Main Drain, at an agreed point, determined by a method approved by the Board's Technical Officers:-
 - (1) Exceeds a rate of 1,200,000 gallons per day, the effluent shall not:-
 - (a) Contain more than 30 parts per million of suspended solids (dried at 105° C), and
 - (b) Take up more than 20 parts per million of dissolved oxygen in 5 days at 20° C.
 - (2) Does not exceed a rate of 1,200,000 gallons per day, the effluent shall not:-
 - (a) Contain more than 15 parts per million of suspended solids (dried at 105° C), and
 - (b) Take up more than 10 parts per million of dissolved oxygen in 5 days at 20° C.
4. Any effluent discharged as storm sewage shall be given settlement treatment in storm tanks prior to discharge to the stream.

The terms of this consent will not, without the consent in writing of the person to whom this consent is given (or his successor), be altered before the expiration of the period ending with the 1st day of October 1966.

5. Sampling facilities shall be provided so as to enable the Board's Sampling Officers to sample the treated effluent discharged before its admixture with either storm sewage or the stream water.

I am to ask that you obtain the approval of the Board's Technical Officers to all sewer crossings of streams.



ASIANTAETH YR
AMGYLCHEDD
ENVIRONMENT
AGENCY

WATER RESOURCES ACT 1991 (schedule 10)

(as amended by the Environment Act 1995)

Application for new consent/variation to an existing consent* to discharge

(* delete as appropriate)

Regional/Area Address: Discharge Consent Applications Environment Agency Wales Chester Road Buckley Flintshire CH7 3AJ	<i>Official Use Only</i> <i>Dist/Area Ref:</i> <i>Application No.</i> C90043701 <i>Date Received:</i> 24/11/03 <i>Fee Received:</i> 24/11/03
---	--

Each applicant must complete the main form and may need to complete a separate annexe if appropriate. Please look through the form and read the notes carefully before you complete it. Processing of your application will be aided by full and accurate completion of all relevant sections and provisions of the necessary plans. If you have any queries regarding the form please contact the person given in the notes.

NOTE:

All information contained within this application will be made available on the public register unless there is a request to withhold any of it. Any such request should provide a full justification stating why the information needs to be withheld (see note xiii).

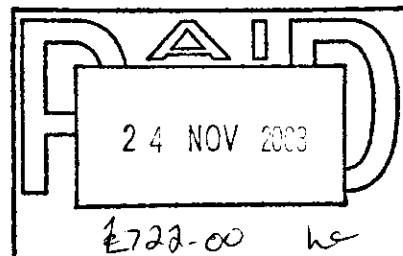
1 SITE ADDRESS

1.1 Address or other sufficient description of land or premises to which this application applies.

Dyffryn Ardudwy WwTW
Access road off Fford yr Orsaf
Dyffryn Ardudwy
Gwynedd

Post Code:

LL44 2HA



2 DETAILS OF DISCHARGE(S)

2.1 State the nature of the discharge(s) (see note i and ii) - tick one or more boxes as appropriate:

Sewage Effluent - volume of 5 cubic metres per day or less

Sewage Effluent - volume greater than 5 cubic metres per day (**complete annexe 1**)

Sewage Effluent discharged under storm or emergency conditions (**complete annexe 2**)

Cooling Water (**complete annexe 3**)

Trade Effluent (*including site drainage*) (**complete annexe 3**)

Others (*please specify*)

2.2 Please state the maximum quantity it is proposed to discharge in any one day 2244.75 m³/day
Briefly state how this figure was calculated (see note ii).

This figure was calculated from a resident and static caravan/holiday home population of 1667 and 3021 respectively. The water consumption rate was taken as 180l/h/d for residents and 120 l/h/d for static caravans. The infiltration was measured during a flow and load survey (241.92 m³.d⁻¹) and the trade flow (5 m³.d⁻¹) was an adjusted consent value to account for usage arising from swimming pool filter backwash.

2.3 a) Indicate proposed means of discharge - tick as appropriate and show on plan:
(for 1, 2 & 3 please state dimensions below)

- | | | |
|---|--------------------------------------|---|
| 1. Pipe <input checked="" type="checkbox"/> | 4. Borehole <input type="checkbox"/> | 7. Sub-Irrigation System <input type="checkbox"/> |
| 2. Channel <input type="checkbox"/> | 5. Well <input type="checkbox"/> | 8. Combination of 6 & 7 <input type="checkbox"/> |
| 3. Culvert <input type="checkbox"/> | 6. Soakaway <input type="checkbox"/> | 9. Other (<i>please specify below</i>) <input type="checkbox"/> |

Outfall 12 inch diameter is existing

b) National Grid Reference(s) of point(s) of discharge (see note iii).

S	H	5	7	7	2	3	2	3	6	3	7
---	---	---	---	---	---	---	---	---	---	---	---

(please indicate on accompanying plans)

2.4 a) The Agency will normally require adequate provision for the taking of samples of the discharge in a safe and convenient manner at any time. Please indicate the means proposed (see note iv) - tick as appropriate and show on plan:

At the outlet At a manhole or sampling chamber

Other (*please specify*)

b) National Grid Reference(s) of sampling point(s) (if different from 2.3 b) above).

S	H	5	7	8	3	7	2	3	6	2	1
---	---	---	---	---	---	---	---	---	---	---	---

(please indicate on accompanying plans)

c) What flow measurement facilities will be provided (see note v)?
Please give details.

FFT will be measured using a new flowmeter at the existing flume, downstream of the storm overflow weir

2.5 a) Type of Treatment Plant(s) to be used (*please specify make and model*) - tick as appropriate:

Septic Tank Package Sewage Treatment Works Other

The works is a conventional primary settlement and biological filter works with humus settlement tanks which is to be upgraded with a new inlet screen (6mm). A new ferric salt dosing system will be provided to enhance the removal of suspended solids and BOD during peak tourist periods

b) Will the treatment process involve the use of any chemicals (eg ferric salts, polyelectrolytes). If yes please give details. Y/N

Ferric salt will be dosed into the inlet channel upstream of the primary settlement tank during peak tourist periods to enhance the efficiency of the settlement process in the primary tanks.

2.6 a) On what date do you anticipate the discharge will commence?

b) If you require the consent for a limited time period please give dates; from:

to:

c) If the discharge is not continuous please detail the period/circumstances when it will occur.

n/a for final effluent discharge

2.7 a) Are there any existing consents for discharges from the premises (see note vi)? Y/N

If yes, please give the reference numbers (*Any further information should be given in Section 5.3*).

Treated sewage effluent is discharged under consent reference number CG0043701 dated 26/1/82

b) Has any person had a Prohibition Notice serviced on them in respect of this site? Y/N

If yes, please give the reference number.

3 SITE DETAILS

3.1 Please give the name of the relevant Planning Authority.

Gwynedd County Council

3.2 Please give details of the premises - tick as appropriate:

- | | | | |
|--|--------------------------|-------------------------------------|-------------------------------------|
| 1. Single Dwelling | <input type="checkbox"/> | 6. Fish Farm | <input type="checkbox"/> |
| 2. Multiple Dwellings | <input type="checkbox"/> | 7. Mineral Workings | <input type="checkbox"/> |
| 3. Industrial Premises | <input type="checkbox"/> | 8. Water Services plc STW | <input checked="" type="checkbox"/> |
| 4. Vehicle Parking Area | <input type="checkbox"/> | 9. Water Supply | <input type="checkbox"/> |
| 5. Commercial Premises (<i>please specify</i>) | <input type="checkbox"/> | 10. Other (<i>please specify</i>) | <input type="checkbox"/> |

3.3 Please indicate source of the water supply - tick as appropriate:

- | | | | |
|--|-------------------------------------|---|--------------------------|
| 1. Well | <input type="checkbox"/> | 5. River (please give name below) | <input type="checkbox"/> |
| 2. Borehole | <input type="checkbox"/> | 6. Estuary (please give name below) | <input type="checkbox"/> |
| 3. Precipitation (eg rain or snow) | <input type="checkbox"/> | 7. Coastal Water (please give name below) | <input type="checkbox"/> |
| 4. Mains (please state water supply company) | <input checked="" type="checkbox"/> | | |
| Dwr Cymru Welsh Water (DCWW) | | | |

4 DETAILS OF RECEIVING ENVIRONMENT

4.1 Receiving Medium - tick the category(s) to which the proposed discharge(s) is(are) to be made:

- | | | | |
|--|-------------------------------------|---------------------------------|--------------------------|
| 1. Estuarial Water (tidal river or stream) | <input checked="" type="checkbox"/> | 5. Into Land | <input type="checkbox"/> |
| 2. River or Stream (non-tidal) | <input type="checkbox"/> | 6. Onto Land | <input type="checkbox"/> |
| 3. Canal | <input type="checkbox"/> | 7. Directly into Groundwater | <input type="checkbox"/> |
| 4. Lake, Lock or Pond | <input type="checkbox"/> | 8. Coastal Water (see note vii) | <input type="checkbox"/> |

State name of receiving water if known:

Arduwy Marsh Main Drain

4.2 In the case of sub-irrigation systems, soakaways or boreholes: **Not Applicable**

- | | |
|---|--------------------------------|
| (a) Is any part of the system within 5 metres of the boundary of the premises? | <input type="checkbox"/> Y/N |
| (b) Is any part of the system within 10 metres of a watercourse? | <input type="checkbox"/> Y/N |
| (c) Is any part of the system within 50 metres of a borehole or spring? | <input type="checkbox"/> Y/N |
| (d) For wells and boreholes state dimension(s) in metres. | <input type="checkbox"/> N/A m |
| (e) For sub-irrigation systems, soakaway pits, wells and boreholes, state maximum depth in metres. | <input type="checkbox"/> N/A m |
| (f) For boreholes, state details of lining in metres: | |
| (i) Depth of lining | <input type="checkbox"/> N/A m |
| (ii) Depth of perforated lining | <input type="checkbox"/> N/A m |
| (iii) Depth of unperforated lining | <input type="checkbox"/> N/A m |
| (g) A percolation test must be carried out in accordance with British Standard BS6297:1983. Have the results been provided? | <input type="checkbox"/> Y/N |

4.3 Is there a foul sewer available to which the discharge(s) could be made (see note viii)?

Y/N

If yes, please give the reasons it is not practical to connect to it (eg distance, flow etc).

5 DETAILS OF APPLICANT AND OTHER INFORMATION

5.1 (See general notes and note ix)

(a) Full name and postal address of applicant. This should be the person who will become the consent holder should consent be issued.

*Dwr Cymru Cyf

*Pentwyn Road

*Nelson

*Treharris

*Mid Glamorgan

*

Post Code: CF46 6LY

Daytime Telephone Number:

Company Registration Number (if appropriate): 2366777

(b) Agent (if any) - Full name and postal address.

*

*

*

*

*

*

Post Code:

Contact Name and Daytime Telephone Number:

5.2

Please give full name and address to which bills should be sent if different to that given above:

*

*

*

*

*

*

Post Code:

Daytime Telephone Number:

5.3 Are there any other factors to be taken into account? Please continue on a separate sheet if necessary.

DECLARATION

I/we:

1. apply under the Water Resources Act 1991 (as amended by the Environment Act 1995) for consent to discharge, as described in this Application. "This Application" means this page, all the other pages of this form and any attached annexes, the attached plan(s), any other sheets attached, and any other written information supplied to support the application.
2. enclose the required application fee, payable to the Environmental Agency (see note x).
3. enclose 3 copies of the plan(s) and location maps with all relevant information clearly marked (see note xi).
4. will pay required advertising costs (see note xii).
5. confirm that I/we* will notify the Environment Agency of any changes in the information in this application which might be material to the continuation of the consent.
6. confirm that the information given in this application and any questions which the Environment Agency may have about it is/will* be true to the best of my/our* knowledge, information and belief and am/are* not aware of any other facts or information which might affect the granting of a consent, or conditions which might be put on it (see note xiii).
7. confirm that I/we* will pay any annual charges due should a consent be granted ~~YES/NO~~*. If no please indicate who will be completing section 5.2 above (see note xiv).

(* Delete as appropriate)

SIGNED: <i>J.P. Edwards</i>	PRINT NAME: <i>J. Edwards</i>
ON BEHALF OF:DWR CYMRU CYF.....	DATED: <i>20/11/03</i>

CONFIDENTIALITY

I/we apply for commercial confidentiality and enclose a full written justification (see note xv).

SIGNED:	DATED:
---------------	--------------

PLEASE RETURN THIS FORM TO THE ADDRESS GIVEN ON THE FRONT PAGE



ANNEXE 1
SEWAGE EFFLUENT GREATER THAN 5 CUBIC METRES PER DAY

Please complete this annexe if you are proposing to discharge more than 5 cubic metres per day of sewage effluent (if the effluent is to contain a trade component Annexe 3 should also be completed).

Official Use Only
Application No.

1. Site Name.

Dyffryn Ardudwy WwTW

2. Please detail the type and number of treatment units you are proposing to use.

Works consists of
New inlet screen (1) (6mm),
Primary settlement tanks (3),
Trickling biofilters, (6)
Humus settlement tanks (3)
Storm tanks (3).
New Ferric Chloride dosing system
Storm Screen (6mm)

3. Volume, rates and overflow settings. (Please give volumes in cubic metres per day or litres per second as indicated below)

- a) Maximum flow to full treatment.
(see note ii) in main guidance notes for population equivalents).
- b) Dry weather flow of discharge(s).
- c) Average daily flow.
- d) Maximum rate of discharge(s)

4. Will there be provisions for storm/emergency discharges?

If yes, please complete Annexe 2.

5. a) Will any self monitoring take place?

If yes, please give details.

Visual monitoring of final effluent quality by United Utilities Operational Services.
Monitoring of the ferric chloride dosing pump will be linked to telemetry. Failure of dosing pump will be signalled to control centre

b) Will automatic sampling equipment be provided?

If yes, please give details of type and location (please indicate on plan).

6. a) Please state the maximum population served by the treatment works.

Works is designed to treat a flow from a resident population 1667 persons plus a holiday population of 3021 occupants in holiday homes. Resident population of 1667 derived from property count of properties connected to sewer. Static caravan population of 3021 obtained from caravan/chalet site web pages and site survey.

- b) Please give reasons for any variations in population, eg holiday resort, training area, seasonal industry etc, and detail the periods/times involved.

The catchment is subject to large increase in summer population due to the presence of several very large static caravan/holiday village sites.

- c) Please state type of catchment/site being served, eg residential, resort, industrial etc.

Catchment is residential with a large holiday influx during the summer months. There are three consented traders, two are caravan parks, the third is a garage.

7. Will a maintenance agreement be set up to manage the sewage works? (see note b) Y/N
If yes, please give details.

Works is subject to operational maintenance contract with United Utilities Operational Services

8. Does the effluent contain a trade component? Y/N

If yes, please complete appropriate section on Annexe 3 for authorised discharges of trade effluent to the sewerage system.

Notes (see also the notes attached to the main form):

- a) *For significant sewage treatment plants full details of the plant design, dry weather flow and Biochemical Oxygen Demand load, along with information on all discharges from the works must be included in order for the application to be processed. Flow monitoring will normally be required for such discharges and details of siting and type of flow recorders should be provided.*
- b) *The Agency require a single body or company to be responsible for the discharge and any bills raised under the Charges for Discharges Scheme. Where multiple dwellings under different ownership are connected to the same system a management company should be set up.*



ANNEXE 3 TRADE EFFLUENT DISCHARGES

Please complete this annexe if you are proposing to make a discharge trade effluent (this includes site drainage).

Official Use Only
Application No.

1. Site Name.

Dyffryn Ardudwy WwTW

2. a) Describe in full the trade effluent and the process(es) from which it arises.

The consented trade effluent arises from

- Caravan park No 1 (24 m³/day) - backwashing of swimming pool filters – 2 m³/day (estimate)
- Caravan park No 2 (24 m³/day) - backwashing of swimming pool filters – 2 m³/day (estimate)
- Garage - Motor vehicle washing – 1 m³/day

b) Please state the type and number of treatment units you are proposing to use (*if site drainage please include details of oil/petrol interception facilities*).

n/a

3. Rainfall Dependent Discharges **Not Applicable**

a) Is the volume going to be rainfall dependent?

Y/N

b) If yes, please give the total area drained.

N/A m²

c) Please give details of any activities which occur in the drainage area which could contaminate surface water (see note b)

N/A

4. Rainfall Independent Discharges **Not Applicable**

a) What is the maximum rate of discharge?

N/A l/s

b) What is the average daily flow?

N/A m³/d

c) For discharges where the source of supply is other than mains water:

i) give the abstraction licence number

N/A

ii) give the National Grid Reference of a point where the influent can be sampled.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

(please mark on the plan)

5. a) Will any self monitoring take place? Y/N
If yes, please give details

Discharges are controlled through trade effluent discharge legislation within the Water Industry Act and are monitored regularly by trade effluent staff for monitoring and charging purposes.

- b) Will automatic sampling equipment be provided? Y/N
If yes, please give details of type, frequency and location (*please indicate on plan*)

6. a) Please state the maximum temperature in degrees Celsius of the effluent when discharged if different from ambient.

n/a

- b) Will the discharge be monitored for temperature? Y/N
If yes, please give details of type and location (*please indicate on plan*)

7. Has an application for Authorisation been made for a 'prescribed process' as defined in Part 1 of the Environmental Protection Act 1990? Y/N

If yes, please complete the following:

- a) The application reference.

n/a

- b) Contact name of case officer.

n/a

8. a) Please indicate if any of the specified substances given below or their compounds will be present in the effluent and if so at what maximum concentration (please give values in micrograms per litre - ug/l). Please see note c.

SUBSTANCE	CONCENTRATION (ug/l)			SUBSTANCE	CONCENTRATION (ug/l)		
	Max	Min	Mean		Max	Min	Mean
Iron				Lead			
Arsenic				Malathion			
Atrazine				Mercury			
Azinphos-ethyl				Nickel			
Azinphos-methyl				PCB's			
Boron				PCSD's			
Cadmium				Parathion			
Carbon tetrachloride				Parathion-methyl			
Chloroform				Pentachlorophenol (PCP)			
Chromium				Perchloroethylene			
Copper				Permethrin			
Cyanide				pH <5.5 or >9.0			
Cyfluthrin				Phosphorus			
DDT				Polychlorinated biphenyls			
1,2 Dichloroethane				Simazine			
Dichlorovos				Sulcofuron			
Dioxins				Tetrachloroethylene			
Drins (eg Aldrin, Dieldrin)				Tributyltin compounds			
Endosulfan				Trichlorobenzene			
Fenitrothion				Trichloroethane			
Fenthion				Trichloroethylene			
Flucofuron				Trifluralin			
Hexachlorobenzene (HCB)				Triphenyltin compounds			
Hexachlorobutadiene (HCBd)				Vanadium			
Hexachlorocyclohexanes (HCH's)				Zinc			

- b) Are there any other significant chemical components used on site which may be contained in the effluent, including biocides or additives? Y/N
If yes, please give details.

No. No change in discharges have been observed or declared by the traders and normal determinands are suite analysed. None of the above substances are known to be present and there are no known red or grey list chemicals in the trade discharges disposed of by Dyffryn Ardudwy WwTW.

Notes (see also the notes attached to the main form):

- a) For direct trade effluent discharges, full details of the type of the effluent are required (eg cooling water from air conditioning units), along with typical analytical details and the results of any toxicity studies on the effluent or its constituents. In certain circumstances the Agency may require that specific samples be taken and tests and analysis carried out. The Agency is empowered to recover any costs incurred as a result of special studies.*
- b) Possible sources of contamination include oil/chemical storage areas, vehicle loading/unloading areas, heavy vehicle parking areas and oil/petrol filling points. Any other potential sources of contamination should be detailed.*
- c) Where discharges of trade effluent take place to a sewerage system, as covered by this application, please give details of all authorised discharges of substances listed in table 8 overleaf.*



ANNEXE 4
WELSH REGION SUPPLEMENTARY INFORMATION ANNEXE

Please complete this annexe for every proposed discharge.

Official Use Only
Application No.

For all proposed discharges:

1. Site Name.

Dyffryn Ardudwy WwTW

2. Is this application being made to reinstate a lapsed Consent?

Y/N

If so, please state the Number of the lapsed Consent:

IMPORTANT: If you are in need of advice on either part of Question 2, please contact the Agency Regional Consents Section on 01222 770088.

3. If the proposed discharge is to be made down a pipe, channel or culvert (as given in Section 2.3 of the main application form), please state the diameter (including units):

Pipe 12 inch dia is existing

4. Please indicate the anticipated cost of the proposed scheme, including any alternatives which may have been considered:

Approx. £390,000

This is for the installation of ferric dosing system with associated safety equipment, a new inlet works screen (6mm) designed to pass all flows up to 6DWF with screenings collection and conditioning, recommissioning two disused storm tanks and automating the biological filter recirculation facility. These are essential improvements and no alternative options exist.

5. Is there any trade effluent component in the proposed discharge?

Y/N

If yes, please confirm here that you have completed and enclosed Annexe 3:

Tick



6. Will the proposed discharge be pumped or made under gravity? (please circle) Pumped / Gravity

If pumped, please state the maximum pump rate in l/sec:

For proposed discharges of sewage in storm or emergency conditions:

7. Please confirm here that you have completed and enclosed both Annexes 1 and 2: Tick
Only Annexe 1 is applicable to a Final Effluent Consent application N/A

8. Please state:

Population served (head)	1667 (resident) 3021 (holiday home occupants)
Consumption (l/head/day) default = 180	180 (resident) 120 (static caravan)
Infiltration (m ³ /day)	241.92
Industrial effluent flow (m ³ /day)	5 (allowance for backwashing swimming pool filters and vehicle washing at garage)
Dry Weather Flow (m ³ /day)	909.53
Soc A (l/sec)	68.6
Works will receive 6 DWF during tourist influx (l/sec)	49.2
Predicted spill frequency (per annum)	Not applicable for final effluent

IMPORTANT NOTES FOR ALL CONSENT APPLICATIONS:

1. **Whoever signs the declaration on the main application form takes responsibility for the discharge, and will become the registered consent holder, if consent is given. In the case of a 'body corporate' (eg a public limited company ('plc'), limited, company, local authority), the 'body corporate' will be the registered consent holder, and the person with the delegated authority to sign on behalf of the 'body corporate' should give their job title.**
2. **Agents making an application on behalf of a client, must attach their clients written authority.**
3. **If the name and/or address of the applicant changes after submission of this application to the Environment Agency, the applicant must inform the Agency in writing.**

Water Resources Act 1991

as amended by the Environment Act 1995



ASiantaeth Yr
AMGylchedd Cymru
ENVIRONMENT
AGENCY WALES

Consents to Discharge

Certificate of Holder

Part A

To: DWR CYMRU CYFYNGEDIG
PENTWYN ROAD
NELSON
Treharris
MID GLAMORGAN CF46 6LY

NB: For a body corporate the job title is a point of contact.

Holder Start Date : 11 February 2004

The Environment Agency ("the Agency") hereby confirm that the above named person (or organisation) is a / the registered Holder of the Consent : CG0043701 Consent Issued : 11 February 2004

Nature of Discharge(s) STEC Sewage effluent

SH5772423638 DYFFRYN ARDUDWY WWTW

Note : This certificate should be kept with the consent document for future reference. If you transfer responsibility for the discharge to somebody else, you must pass the consent to them and tell the Agency within 21 days. Responsibility for the consent cannot be disclaimed by the Holder but the registration of Holder may be transferred to a successor. To do this, please complete the form below (Part B), then tear it off and return it to the address shown. If you fail to transfer the consent, even though you are no longer on the site, you will still be liable for prosecution for pollution. If you transfer the consent but do not tell us, you will be committing an offence. In case of any queries, please contact your local Environment Agency office, quoting the Consent Reference.

----- cut here -----

Part B

Please complete in block capitals or type

To: Water Resources Act 1991 : Notice of transfer of Consent to Discharge

Consent Reference : CG0043701

Name : DWR CYMRU CYFYNGEDIG

Consent Issued : 11 February 2004

Address : PENTWYN ROAD

NELSON

Treharris

MID GLAMORGAN CF46 6LY

I / We* hereby serve notice on the Agency that I / we* am / are* no longer a / the* Holder of the above consent which will be / was* transferred to : * delete as appropriate

Name(s) of the new Holder(s) :

Post Code :

Date of Transfer to new Holder(s)

Signed :

Dated :

Name (block capitals) :

Position (if appropriate) :

(to be completed when signing on behalf of corporate bodies)

Deddf Adnoddau Dwr 1991
fel y'i diwygiwyd gan Ddeddf yr Amgylchedd 1995



ASiantaeth yr
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES

Caniatâd Gollwng

Tystysgrif Daliwr

Rhan A

At : DWR CYMRU CYFYNGEDIG
PENTWYN ROAD
NELSON
TRESHARRIS
MID GLAMORGAN CF46 6LY

DS: I gorfforaeth gorfforedig mae teitl y swydd yn bwynt cysylltu.

Dyddiad Cychwyn y Daliwr : 11 Chwefror 2004

Mae Asiantaeth yr Amgylchedd ("yr Asiantaeth") yn cadarnhau drwy hyn mai / bod y sawl (neu sefydliad) a enwyd uchod yw / yn ddaliwr cofrestredig y caniatâd : CG0043701 Cyhoeddwyd y Caniatâd : 11 Chwefror 2004

Natur y Gollyngiad(au) : STEC Carthffrwd

yn SH5772423638 DYFFRYN ARDUDWY WWTW

Noder : Dylid cadw'r dystysgrif hon gyda'r ddogfen ganiatâd i gyfeirio ati yn y dyfodol. Os byddwch yn trosglwyddo cyfrifoldeb am y gollyngiad i rywun arall, rhaid i chi drosglwyddo'r caniatâd iddo ef neu hi a dweud wrth yr Asiantaeth cyn pen 21 diwrnod. Ni all y Daliwr wadu cyfrifoldeb am y caniatâd, ond gall cofrestriad y Daliwr gael ei drosglwyddo i olynnydd. I wneud hynny, byddwch gystal â llenwi'r ffurflen isod (Rhan B), yna'i dychwelyd i'r cyfeiriad a nodir. Os fethwch â throsglwyddo'r caniatâd, hyd yn oed os nad ydych ar y safle mwyach, gallwch gael eich erlyn am achosi llygredd. Os trosglwyddwch y caniatâd ond heb ddweud wrthym, yna byddwch yn cyflawni trosedd. Os bydd gennych unrhyw ymholiadau a fydddech gystal â chysylltu â'ch swyddfa Asiantaeth yr Amgylchedd lleol, gan ddyfynnu Cyfeirnod y Caniatâd.

- - - - - torruch yma - - - - -

Rhan B

Llenwch mewn priflythrennau bras neu deipio

At : **Deddf Adnoddau Dwr 1991 : Hysbysiad am drosglwyddo Caniatâd Gollwng**

Cyfeirnod y Caniatâd : CG0043701

Enw : DWR CYMRU CYFYNGEDIG

Cyhoeddwyd y 11 Chwefror 2004

Cyfeiriad : PENTWYN ROAD

Caniatâd :

NELSON

TRESHARRIS

MID GLAMORGAN CF46 6LY

Yr wyf fi / Yr ydym ni* drwy hyn yn hysbysu'r Asiantaeth nad fi / ni mwyach yw* Daliwr / Deiliaid y caniatâd uchod a fydd yn cael / cafodd ei drosglwyddo i

* dilêer fel yn briodol

Enw(au) y Daliwr / Deiliaid newydd :

Côd Post :

Dyddiad Trosglwyddo i'r Daliwr / Deiliaid newydd :

Llofnodwyd :

Dyddiedig :

Enw (priflythrennau bras) :

Swydd (os yn briodol) :

(i'w lenwi pan yn llofnodi ar ran corfforaethau corfforedig)

CONSENT NO.	CG0043701
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ASiantaeth YR
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES

WATER RESOURCES ACT 1991

SECTION 88 - SCHEDULE 10

(AS AMENDED BY THE ENVIRONMENT ACT 1995)

VARIATION OF CONSENT TO DISCHARGE

TO: Environment Quality Scientist
Dŵr Cymru Cyf.
Pentwyn Road
Nelson
Treharris
Mid Glamorgan CF46 6LY

COPY

In pursuance of an application by the consent holder for variation of consent, the **ENVIRONMENT AGENCY** ("The Agency") in pursuance of its powers under the Water Resources Act 1991 **HEREBY VARIES ITS CONSENT** to the making of a discharge **OF SEWAGE EFFLUENT** as follows:

Secondary treated sewage effluent incorporating the requirements of the Urban Waste Water Treatment Regulations (UWWTR) 1994
with respect to Consent No. CG0043701 issued on the 26th April 1982

FROM: DYFFRYN ARDUDWY WASTEWATER TREATMENT WORKS

AT: ACCESS ROAD OFF FFORD YR ORSAF, DYFFRYN ARDUDWY, GWYNEDD LL44 2HA

TO: THE ARDUDWY MARSH MAIN DRAIN

HEREAFTER SUBJECT TO the conditions set out in the following schedule(s):

Secondary Treated Sewage Effluent

Schedule No. CG0043701 01

UWWT Regulations 1994

Schedule No. CG0043701 01/U

Subject to the provisions of Paragraphs 7 and 8 of Schedule 10 of the Water Resources Act 1991, no notice shall be served by the Agency, which alters the effect of variations made to this consent, without the agreement in writing of the consent holder, during a period of 4 years from the date this variation is issued.

This variation of consent is issued on the 11th day of February 2004

This variation of consent takes effect on the 31st day of March 2005

Signed

IWAN THOMAS

Environment Management Team Leader

Asiantaeth yr Amgylchedd Cymru
Ffordd Penlan, Bangor, Gwynedd. LL57 4DE. Ffôn 01248 670770, Ffacs 01248 670561

Environment Agency Wales
Ffordd Penlan, Bangor, Gwynedd. LL57 4DE. Tel 01248 670770, Fax 01248 670561





CONSENT NO.	CG0043701
SCHEDULE NO.	CG0043701 01
DATE ISSUED	11th February 2004

CONDITIONS OF CONSENT TO DISCHARGE

Secondary Treated Sewage Effluent ("the Discharge")

FROM: Dyffryn Ardudwy Wastewater Treatment Works

NATURE

1. The Discharge shall consist solely of secondary treated sewage effluent.

LOCATION

2. The Discharge shall be made in the manner and at the place specified as:
 - (a) discharging via a 12 inch diameter pipe;
 - (b) discharging to the Ardudwy Marsh Main Drain;
 - (c) at National Grid Reference SH 57723 23637;
 - (d) shown marked 'Consent Point' on Plan CG0043701 attached as Annex 3.

SAMPLE POINT

3. An appropriately labelled sample point shall be provided and maintained at National Grid Reference SH 57837 23621, as shown marked 'Discharge Sample point' on the Plan CG0043701 or some other point as agreed in writing with the Agency, so that a representative spot sample of the Discharge may be obtained. The Consent Holder shall ensure that all constituents of the Discharge pass through the said sampling point at all times and in any legal proceedings it shall, for the purposes of Section 10 of the Rivers (Prevention of Pollution) Act 1961, be presumed, until the contrary is shown, that any sample of the Discharge taken at the said sampling point is a sample of what was being discharged into controlled waters.





CONSENT NO.	CG0043701
SCHEDULE NO.	CG0043701 01

VOLUME

4. The volume of the Discharge shall not exceed 2244.75 cubic metres per day.
5. The Dry Weather Flow of the Discharge shall not exceed 909.53 cubic metres per day.

For the purpose of this condition Dry Weather Flow shall mean the average daily flow to the treatment works during seven consecutive days without rain (excluding a period which includes public holidays) following seven days during which the rainfall did not exceed 0.25 millimetres on any one day.

6. The rate of discharge shall not exceed 25.9 litres per second.

FLOW MEASUREMENT

7. A continuous flow monitoring and Recording system, to a specification provided by the Agency, with on-site visual display from which readings can be readily obtained by the Agency, shall be provided by 31st March 2005 and operated to record the daily volume and instantaneous flow of the discharge.
8. As soon as practicable after completion of the flow recorder installation the Consent Holder shall employ an independent expert to certify that the installation complies with the Agency's specification. The Consent Holder shall satisfy himself as to the professional competence of the expert. A copy of the certifier's report shall be provided to the Agency when it is available.
9. Records of the flow readings shall be maintained by the Consent Holder and shall be provided to the Agency when requested, in a format specified by the Agency.
10. The Consent Holder shall produce and maintain a quality control manual, to the satisfaction of the Agency, specifying procedures for the calibration, operation and maintenance of the flow recorder. The flow recorder shall be calibrated, operated and maintained by the Consent Holder in accordance with the provisions of the manual. The Consent Holder shall keep a record of these procedures available for inspection by the Agency and provide a copy to the Agency on request.





CONSENT NO.	CG0043701
SCHEDULE NO.	CG0043701 01

11. The Consent Holder shall record all failures of the continuous flow recorder and any other breaks in the flow record. The reasons for these failures and breaks shall be recorded and all steps taken to prevent a re-occurrence. The Consent Holder shall ensure that as far as possible the recorder remains fully operational at all times. Any failures shall be remedied as soon as possible.
12. Flows of the discharge shall be measured at NGR SH 57897 23613, or such other point(s) as is/are agreed by the Agency.

COMPOSITION

13. (a) Subject to paragraph (b) below, the Discharge shall not contain more than;
 - (i) 25 milligrammes per litre of biochemical oxygen demand (measured after 5 days at 20 °C with nitrification suppressed by the addition of allyl-thiourea)
 - (ii) 35 milligrammes per litre of suspended solids (measured after drying at 105 °C);
- (b) The limit for any of the relevant parameters set out in paragraph (a) above may be exceeded where, in any series of samples of the Discharge taken at regular but randomised intervals in any period of twelve consecutive months as listed in Column 1 of the table at Annex 1 to this consent, no more than the relevant number of samples, as listed in Column 2 of the said table, exceed the applicable limit for that relevant parameter.





CONSENT NO.	CG0043701
SCHEDULE NO.	CG0043701 01

WORKS OPERATION

14. The works shall be operated and the effluent shall be treated in a manner which, so far as reasonably practicable, minimises the polluting effects of the discharge made from the works on controlled waters.

This condition does not require -

- (a) any higher standard to be achieved in relation to any characteristic of the discharge which is specifically regulated by Condition 13 than is required by those conditions;
- (b) any alteration of the works or a change in the type of treatment used.

UNUSUAL WEATHER

15. (a) No sample of the discharge, taken at a time when unusual weather conditions are adversely affecting the operation of the sewage treatment works, shall be taken into account in deciding whether or not conditions 13, and 14 of this consent schedule have been complied with.
- (b) For the purpose of this condition "unusual weather conditions" shall include:
- (i) low ambient temperatures as evidenced by effluent temperatures of 5 °C or less, or by the freezing of mechanical equipment in the works;
 - (ii) significant snow deposits;
 - (iii) tidal or fluvial flooding;
 - (iv) weather conditions causing unforeseen loss of power supply to the sewage treatment which could not be ameliorated by the reasonable provision and operation of standby generation facilities.





CONSENT NO.	CG0043701
SCHEDULE NO.	CG0043701 01

- (c) On any occasion where unusual weather conditions adversely affect the operation of the sewage treatment works, the Consent Holder shall use its best endeavours to mitigate that adverse affect.
- (d) For a sample of the discharge to be considered for the purposes of (a) above, the Consent Holder shall notify the Agency by telefax or telephone as soon as unusual weather conditions are known to have adversely affected operations and shall confirm the circumstances in writing as soon as possible thereafter (and in any event within 14 days of the occurrence of such conditions). That notification shall include a full description of the unusual weather conditions and their impact on the operation of the works.

RECORDING AND REPORTING

- 16. (a) The Consent Holder shall establish and operate a documented maintenance programme and record all non-routine actions undertaken that may have adversely affected effluent quality. Copies of the programme shall be made available for inspection by the Agency's officers at all reasonable times.
 - (b) On request the Consent Holder shall supply the Agency with a written report on the maintenance and all non-routine actions that may have adversely affected effluent quality.
17. The Consent Holder shall notify the Agency in writing if any known or planned introduction or material change in respect of discharges from trade premises to the environment occurs, that may increase or introduce into the effluent any "dangerous substance" (set out in Annex 2 to this notice as updated from time to time and notified to the Consent Holder in writing), and any other substance considered by the Consent Holder as having or likely to have a significant effect on the receiving waters.





CONSENT NO.	CG0043701
SCHEDULE NO.	CG0043701 01

SUBSTANTIAL CHANGE

18. (a) A discharge shall not be made from the works if it would cause a significant increase in the polluting effects of the discharge on controlled waters as a result of a new or altered discharge of trade effluent into the works.
- (b) A discharge of trade effluent into the works is new if -
- (i) it is made by the sewerage undertaker and is of a kind not made into the works by the undertaker immediately before the date of effect of this consent; or
 - (ii) it is made by a third party and the discharge is authorised on or after that date.
- (c) A discharge of trade effluent into the works is altered if -
- (i) it is made by the sewerage undertaker and its composition or quantity changes significantly on or after date of variation of this consent ; or
 - (ii) it is made by a third party and the alteration of the discharge is authorised on or after that date.
- (d) An increase in the polluting effects of the discharge on controlled waters is not significant for the purposes of this condition if it relates to any characteristics of the discharge which are specifically regulated by condition 13 of this consent schedule but it may be significant if it is caused by a change in some other characteristic of the discharge.
- (e) For the purposes of this condition “trade effluent” means -
- (i) any discharge by the sewerage undertaker other than
 - (1) domestic sewage from premises connected directly or indirectly to the works; or
 - (2) surface water run-off;
 - (ii) any discharge by a third party which is authorised under Chapter III of Part IV of the Water Industry Act 1991 or which is only accepted as a result of a contract with the sewerage undertaker.





CONSENT NO.	CG0043701
SCHEDULE NO.	CG0043701 01

UNAUTHORISED DISCHARGE

19. (a) A discharge made from the works shall not contain any poisonous, noxious or polluting matter or solid waste matter which is attributable to any unauthorised discharge into the works.
- (b) A discharge into the works is unauthorised if it is made by a third party and either there is no obligation to receive it or conditions subject to which there is an obligation to receive it are not observed.
- (c) Nothing in this, or any other, condition of this consent prevents anyone from relying on any defence available to them under Section 87 of the Water Resources Act 1991.

START DATE

20. Until discharge is permitted under the terms of this consent, the quality of the effluent from Dyffryn Ardudwy Wastewater Treatment Works shall be controlled under the terms of the consent issued on 26th April 1982. There shall be no discharge under the terms of this consent until the 31st March 2005 or the end of commissioning of the works which ever is the sooner. The Consent Holder shall give the Agency at least 28 days written notice before making the discharge.





CONSENT NO.	CG0043701
SCHEDULE NO.	CG0043701 01/U
DATE ISSUED	11 th February 2004

CONDITIONS OF CONSENT TO DISCHARGE

Urban Waste Water Treatment Regulations 1994 ("the Discharge")

FROM: Dyffryn Ardudwy Wastewater Treatment Works

- U0**
- (a) The Consent Holder shall comply with the Urban Waste Water Treatment (England and Wales) Regulations 1994 ("the Regulations").
 - (b) For the purpose of conditions U1 and 2 below, interpretations and references to a numbered regulation or Schedule shall have the meaning as in the Regulations, unless otherwise indicated.
- U1**
- (a) The Discharge derives from an agglomeration with a population equivalent of between 2,000 and 10,000, discharging to freshwaters.
 - (b) The Consent Holder shall inform the Agency in writing of any change, or proposed change, to the population equivalent such as would make a material change to the application of the Regulations and shall, on request, inform the Agency in writing of the actual population equivalent.
 - (c) The Discharge shall be subject to Regulation 5(1) and shall satisfy the relevant requirements of Part I of Schedule 3.
- U2**
- (a) The Consent Holder shall provide apparatus for the purpose of:
 - (i) measuring or recording the volume, rate of flow, nature, composition or temperature, and
 - (ii) collecting samples of any waste water, as is necessary to ensure compliance with paragraph (b) below.
 - (b) The Consent Holder shall monitor the Discharge to verify compliance with the requirements of condition U1(c) above in accordance with control procedures as set out in Part II of Schedule 3.
 - (c) The Consent Holder shall provide to the Agency any information collected in complying with paragraph (b) above in a manner agreed with the Agency.





ANNEX 1

TABLE

<u>Column 1</u>	<u>Column 2</u>
4-7	1
8-16	2
17-28	3
29-40	4
41-53	5
54-67	6
68-81	7
82-95	8
96-110	9
111-125	10
126-140	11
141-155	12
156-171	13
172-187	14
188-203	15
204-219	16
220-235	17
236-251	18
252-268	19
269-284	20
285-300	21
301-317	22
318-334	23
335-350	24
351-365	25

Number of samples
taken in any period
of 12 months

Maximum number of
samples permitted to
exceed limit for given
determinand

CONSENT NO. CG0043701



ASiantaeth Yr
Amgylchedd Cymru
ENVIRONMENT
AGENCY WALES

ANNEX 2

- | | |
|--|------------------------------|
| 1. Mercury and its compounds | 2. Cadmium and its compounds |
| 3. Hexachlorocyclohexane
(lindane and related compounds) | 4. Carbon tetrachloride |
| 5. DDT (the isomers of 1,1,1-trichloro-2,2 bis{p-chlorophenyl} ethane) | |
| 6. Pentachlorophenol (PCP) | 7. Aldrin |
| 8. Dieldrin | 9. Endrin |
| 10. Isodrin | 11. Hexachlorobenzene (HCB) |
| 12. Hexachlorobutadiene (HCBd) | 13. Chloroform |
| 14. Polychlorinated biphenyls | 15. Dichlorvos |
| 16. 1,2-Dichloroethane | 17. Trichlorobenzene |
| 18. Atrazine | 19. Simazine |
| 20. Tributyltin compounds | 21. Triphenyltin compounds |
| 22. Trifluralin | 23. Fenitrothion |
| 24. Azinphos-methyl | 25. Malathion |
| 26. Endosulfan | 27. Lead |
| 28. Chromium | 29. Zinc |
| 30. Copper | 31. Nickel |
| 32. Arsenic | 33. *Iron |
| 34. *pH if outside the range 5.5 to 9.0 | 35. *Boron |
| 36. Vanadium | 37. PCSD'S |
| 38. Cyfluthrin | 39. Sulcofuron |
| 40. Flucifuron | 41. Permethrin |
| 42. 4-Chloro-3-methyl-phenol | 43. 2-Chlorophenol |
| 44. 2,4-Dichlorophenol | 45. 2,4-D (ester) |
| 46. 2,4-D (non ester) | 47. 1,1,1-Trichloroethane |
| 48. 1,1,2-Trichloroethane | 49. Bentazone |
| 50. Benzene | 51. Biphenyl |
| 52. Chloronitrotoluenes | 53. Demeton |
| 54. Dimethoate | 55. Linuron |
| 56. MCPA | 57. Mecoprop |
| 58. Mevinphos | 59. Napthalene |
| 60. Omethoate | 61. Toluene |
| 62. Triazophos | 63. Xylene |
| 64. Cyanide | 65. Azinphos-ethyl |
| 66. Fenthion | 67. Parathion |
| 68. Parathion-methyl | 69. Trichloroethylene |
| 70. Tetrachloroethylene | 71. Dioxins |
| 72. PAHs | 73. Nonyl phenol |
| 74. Nonyl phenyl ethoxylate | 75. Di-ethylhexyl phthalate |
| 76. Bisphenol-A | 77. Diazinon |
| 78. Chlorfenvinphos | 79. Chlorotoluron |
| 80. Isoproturon | 81. Diuron |
| 82. Propetamphos | 83. Flumethrin |
| 84. Amitraz | 85. High-Cis Cypermethrin |
| 86. Cyromazine | 87. Deltamethrin |
| 88. Cypermethrin | |

This list is applicable as at 1 December 1998 and will be updated as and when changes to the relevant legislative requirements occur.

*Notification to the Agency by the Consent holder is only required in respect of changes to trade effluents likely to cause significant changes to the pH value, and/or iron or boron concentrations, of the crude sewage.





ASiantaeth Yr
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES

Eich cyf/Your ref.
Ein cyf/Our ref. DR/RP/CG0043701
Enquiries Ruth Prichard
Dyddiad/Date:

Environment Quality Scientist
Dwr Cymru Cyf
Pentwyn Road
Treharris
Mid Glamorgan
CF46 6LY



Dear Sir/Madam,

RE: WATER RESOURCES ACT 1991, SCHEDULE 10 (AS AMENDED BY THE ENVIRONMENT ACT 1995) APPLICATION FOR VARIATION OF CONSENT TO DISCHARGE NO CG0043701

Further to your application for variation of consent of the Agency to discharge under the provisions of Section 88 of the Water Resources Act 1991, I enclose the Agency's formal notice of the variations made to the conditions of the consent to discharge sewage effluent from Dyffryn Ardudwy Wastewater Treatment Works, Access Road off Fford Yr Orsaf, Dyffryn, Ardudwy, Gwynedd.

Under the present Scheme of Charges for Discharges to Controlled Waters an annual charge will be made for all consents to discharge, except where the discharge is of sewage effluent of five cubic metres or less per day. This charge is based on information derived from the conditions attached to the consent to discharge, as outlined in the enclosed leaflet. A change in conditions may therefore result in a change in annual charge, you may therefore receive a revised bill in due course.

If you are not satisfied with the new conditions of the consent you may appeal against the decision to the National Assembly for Wales at Cathays Park, Cardiff CF10 3NQ.

Please take careful note that if the holder of the consent changes, you must inform the Agency IN WRITING as soon as possible of the name of the new holder. This to ensure that the rights and charges associated with the Consent are transferred to the new holder. A certificate of Holder notice will be sent to you shortly which is designed for this purpose, and should be kept safely with the Consent until required.

Asiantaeth yr Amgylchedd Cymru
Ffordd Caer, Bwcle, Sir y Fflint CH7 3AJ
Ffôn 01244 550124 Ffacs 01244 550144

Environment Agency Wales
Chester Road, Buckley, Flintshire CH7 3AJ
Tel 01244 550124 Fax 01244 550144





ASiantaeth yr
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES

If you have any queries regarding the enforcement of this consent, please do not hesitate to contact Iwan Thomas Team Leader Environment Protection, Environment Agency, Llwyn Brain, Ffordd Penlan, Parc Menai, Bangor, Gwynedd, LL57 4DE

Yours sincerely,

Kelvin Graham
Team Leader Customer Contact and Authorisations
Enc.

Asiantaeth yr Amgylchedd Cymru
Ffordd Caer, Bwele, Sir y Fflint CH7 3AJ
Ffôn 01244 550124 Ffacs 01244 550144

Environment Agency Wales
Chester Road, Buckley, Flintshire CH7 3AJ
Tel 01244 550124 Fax 01244 550144





ASiantaeth yr
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES

CONSENT NO.	CG0043701
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**ENVIRONMENT AGENCY
WATER RESOURCES ACT 1991
(As amended by the Environment Act 1995)**

NOTICE OF MODIFICATION OF CONSENT TO DISCHARGE

TO: Environment Quality Scientist
Dŵr Cymru Cyf.
Pentwyn Road, Nelson, Treharris
Mid Glamorgan CF46 6LY

WHEREAS the Agency in pursuance of its powers under the Water Resources Act 1991 (as amended by the Environment Act 1995) **GRANTED CONSENT VARIATION** to the making of a discharge of **SEWAGE EFFLUENT** on the 11th day of February 2004

FROM: Dyffryn Ardudwy Wastewater Treatment Works

the Agency in pursuance of its powers under the Water Resources Act 1991 (as amended by the Environment Act 1995) hereby **GIVES NOTICE** that **CONSENT CG0043701** is hereby modified as follows:

A discharge of secondary treated sewage effluent

FROM: Dyffryn Ardudwy Wastewater Treatment Works

AT: Access Road off Fford Yr Orsaf, Dyffryn Ardudwy, Gwynedd LL44 2HA

TO: The Ardudwy Marsh Main Drain

The conditions of Schedule 01 consent number CG0043701 dated 11th February 2004 are modified as detailed in this notice.

Subject to the provisions of Paragraphs 7 and 8 of Schedule 10 of the Water Resources Act 1991, no notice shall be served by the Agency which alters the effect of modifications made by this notice, without the agreement in writing of the Consent Holder, during a period of 4 years from the date this notice is served.

Dated this 17th day of May 2004

Signed

IWAN THOMAS

Environment Management Team Leader

Asiantaeth yr Amgylchedd Cymru
Ffordd Penlan, Bangor, Gwynedd. LL57 4DE. Ffôn 01248 670770, Ffacs 01248 670561

Environment Agency Wales
Ffordd Penlan, Bangor, Gwynedd. LL57 4DE. Tel 01248 670770. Fax 01248 670561





ASiantaeth YR
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES

CONSENT NO.	CG0043701
SCHEDULE NO.	CG0043701 01
DATED	17 th May 2004

Conditions to be modified

The effective date shall be modified by the addition of condition 20 to read as follows:

START DATE

Until discharge is permitted under the terms of this consent, the quality of the effluent from Dyffryn Ardudwy Wastewater Treatment Works shall be controlled under the terms of the consent issued on 26th April 1982. There shall be no discharge under the terms of this consent until the 31st March 2004 or the end of commissioning of the works which ever is the sooner. The Consent Holder shall give the Agency at least 28 days written notice before making the discharge.

Other conditions of the consent

All other conditions of the consent remain in force. Consent CG0043701 is updated accordingly.





ASiantaeth YR
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES

Ein cyf/Our ref. DR/RP/CG0043701

Dyddiad/Date: 24th May 2004

Tony Andrews
Environment Quality Scientist
Dwr Cymru Cyf
Pentwyn Road
Nelson, Treharris
Mid Glamorgan
CF46 6LY

COPY

Dear Sir,

RE: WATER RESOURCES ACT 1991, SCHEDULE 10 (AS AMENDED BY THE ENVIRONMENT ACT 1995) MODIFICATION OF CONSENT TO DISCHARGE NO.CG0043701

Further to our recent correspondence concerning the consent to discharge sewage effluent from Dyffryn Ardudwy Wastewater Treatment Works, I enclose the Agency's formal notice of the modifications made to the conditions of the consent.

Under the present Scheme of Charges for Discharges to Controlled Waters an annual charge will be made for all consents to discharge, except where the discharge is of sewage effluent of five cubic metres or less per day. The charge is based on information derived from the conditions attached to the consent to discharge, as outlined in the enclosed leaflet. A change in conditions may therefore result in a change in annual charge, you may therefore receive a revised bill in due course.

If you are not satisfied with the new conditions of the consent you may appeal against the decision to The National Assembly for Wales at Cathays Park, Cardiff CF10 3NQ.

Please take careful note that if the holder of the consent changes, you must inform the Agency IN WRITING as soon as possible of the name of the new holder. This is to ensure that the rights and charges associated with the Consent are transferred to the holder. A Certificate of Holder notice will be sent to you shortly which is designed for this purpose, and should be kept safely with the Consent until required.

Asiantaeth yr Amgylchedd Cymru
Ffordd Caer, Bwcle, Sir y Fflint CH7 3AJ
Ffon 01244 550124 Ffacs 01244 550144

Environment Agency Wales
Chester Road, Buckley, Flintshire CH7 3AJ
Tel 01244 550124 Fax 01244 550144





**ASiantaeth yr
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES**

If you have any queries regarding the enforcement of this consent, please do not hesitate to contact Iwan Thomas, Team Leader Environment Protection, Environment Agency Wales, Llwyn Barian, Ffordd Penlan, Parc Menai, Bangor, Gwynedd, LL57 4DE.

Yours sincerely,

Kelvin Graham
Team Leader Customer Contact & Authorisations

Asiantaeth yr Amgylchedd Cymru
Ffordd Caer, Bwcle, Sir y Fflint CH7 3AJ
Ffon 01244 550124 Ffacs 01244 550144

Environment Agency Wales
Chester Road, Buckley, Flintshire CH7 3AJ
Tel 01244 550124 Fax 01244 550144



Water Resources Act 1991
as amended by the Environment Act 1995
Consent to Discharge
Certificate of Holder



ENVIRONMENT
AGENCY

Part A

To: DWR CYMRU CYFYNGEDIG
CONSENTS REGULATION OFFICER
PLAS-Y-FFYNNON
CAMERIAN WAY
BRECON LD3 7HP



The **Environment Agency** ("the Agency") hereby confirm that the above named person is a/the registered holder of consent CG0043601

Nature of Discharge(s); SEWAGE EFF/TREATED EFF/CONTINUOUS
at CAPEL CURIG STW

Note: This certificate should be kept with the consent document for future reference. If you transfer responsibility for the discharge to somebody else you must pass the consent to them and tell the Agency within 21 days. **Responsibility for the consent cannot be disclaimed by the holder but the registration of holder may be transferred to a successor.** To do this please complete the form below, then tear it off and return it to the address shown. If you fail to transfer the consent, even though you are no longer on the site, you may still be liable for prosecution for pollution. If you transfer the consent but do not tell us, you will be committing an offence. In case of any queries please contact your local Environment Agency office.

Part B Please complete in block capitals or type.

To:

Water Resources Act 1991: Notice of transfer of consent to discharge

Consent: Name: _____
Address: _____

I/We* hereby serve notice on the Agency that I/we* am/are* no longer a/the* Holder of the above consent which will be/was* transferred to: * delete as appropriate

Name(s) of new holder(s):

Address:

Post Code:

Date of Transfer to new Holder(s):

Signed: **Dated:**

Name (block capitals): **Position:**

(to be completed when signed on behalf of corporate bodies)




WELSH OFFICE

CONTROL OF POLLUTION ACT 1974: SECTIONS 34 AND 55
THE CONTROL OF POLLUTION (DISCHARGES BY AUTHORITIES) REGULATIONS 1984
CONSENT FOR A DISCHARGE

1. The Welsh Water Authority (hereinafter referred to as 'the Water Authority') proposes to discharge sewage effluent from the Capel Curig Sewage Treatment Works to the Afon Llugwy at National Grid Reference SH 7376 5682 in accordance with the application dated 24 March 1988.
2. The proposal requires the consent of the Secretary of State for Wales in pursuance of sections 34 and 55 of the Control of Pollution Act 1974 and the Control of Pollution (Discharges by Authorities) Regulations 1984.
3. THE SECRETARY OF STATE FOR WALES hereby consents to the proposed discharge subject to the discharge conforming at all times to the terms of the certificate attached hereto.

Dated this 17 day of
May 1988

Signed 
on behalf of the Secretary
of State for Wales

THE CONTROL OF POLLUTION ACT 1974: SECTION 34
THE CONTROL OF POLLUTION (DISCHARGES BY AUTHORITIES)
REGULATIONS 1984 (SI 1984 NO 1200)

CERTIFICATE TO BE SUBMITTED WITH A REQUEST FOR A
DESCRIPTIVE DISCHARGE CONSENT

On behalf of the Welsh Water Authority we certify that, in respect of the discharge from the Authority's sewage treatment works at CAPEL CURIG

(National Grid Reference SH 73765682).

1. The effluent derives from domestic sewage from a population of 100 or less and contains no authorised trade waste.
2. There are no potable water supply intakes downstream which are likely to be adversely affected.
3. As far as is reasonably practicable, the works shall be operated so as to prevent:
 - i any matter being present in the effluent which will cause the receiving water to be poisonous or injurious to fish or to their spawn or spawning grounds or food or otherwise cause damage to the ecology of the receiving waters; and
 - ii the treated effluent from having any adverse visual and other environmental impact.
4. The authority will operate the works having regard so far as is relevant, to the guidance set out in the National Water Council's Occasional Technical Paper Number 4, "The Operation and Maintenance of Small Sewage Works" dated January 1980. In particular the works shall be maintained properly such that:
 - a. it remains fully operational except at times of mechanical or electrical breakdown;
 - b. any such breakdowns shall be attended to promptly and the equipment returned to normal operation as soon as possible; and
 - c. tanks shall be desludged at sufficient frequency and in such a manner as to prevent problems with septic sludge, rising sludge for excessive carryover of suspended solids.

Signed
(Name)
Divisional Operations Manager

Signed
(Name)
District Scientist

Dated this
Day of 1985

Welsh Office Ref

FORM COPA 1
(MARCH 1986)

WMA SQ REF	0000039
WMA DIST REF	66/8/SI

CONTROL OF POLLUTION ACT 1974: SECTION 34
 THE CONTROL OF POLLUTION (DISCHARGES BY AUTHORITIES)
 REGULATIONS 1984 (SI 1984 No 1200)

APPLICATION FOR A CONSENT TO DISCHARGE
 EFFLUENT FROM WORKS VESTED IN THE
 WELSH WATER AUTHORITY

To: Water Administration, Water and Environmental Protection Division,
 Room 2002, Cathays Park, Welsh Office, Cardiff CF1 3NQ

Name of Discharge CAPEL CURIG STW

Division NORTH/WEST

I hereby apply for consent to the above named discharge the details of which
 are contained in Form COPA 4 attached

Contact within the Authority R.P. DALE
 WATER QUALITY OFFICER
 NORTHERN DISTRICT

Date 23.3.88

.....
 Signed on behalf of the
 Welsh Water Authority.

FOR WELSH OFFICE USE ONLY

Application and Certificate checked Signed Date

Consent and Certificate issued Signed Date

NOTES

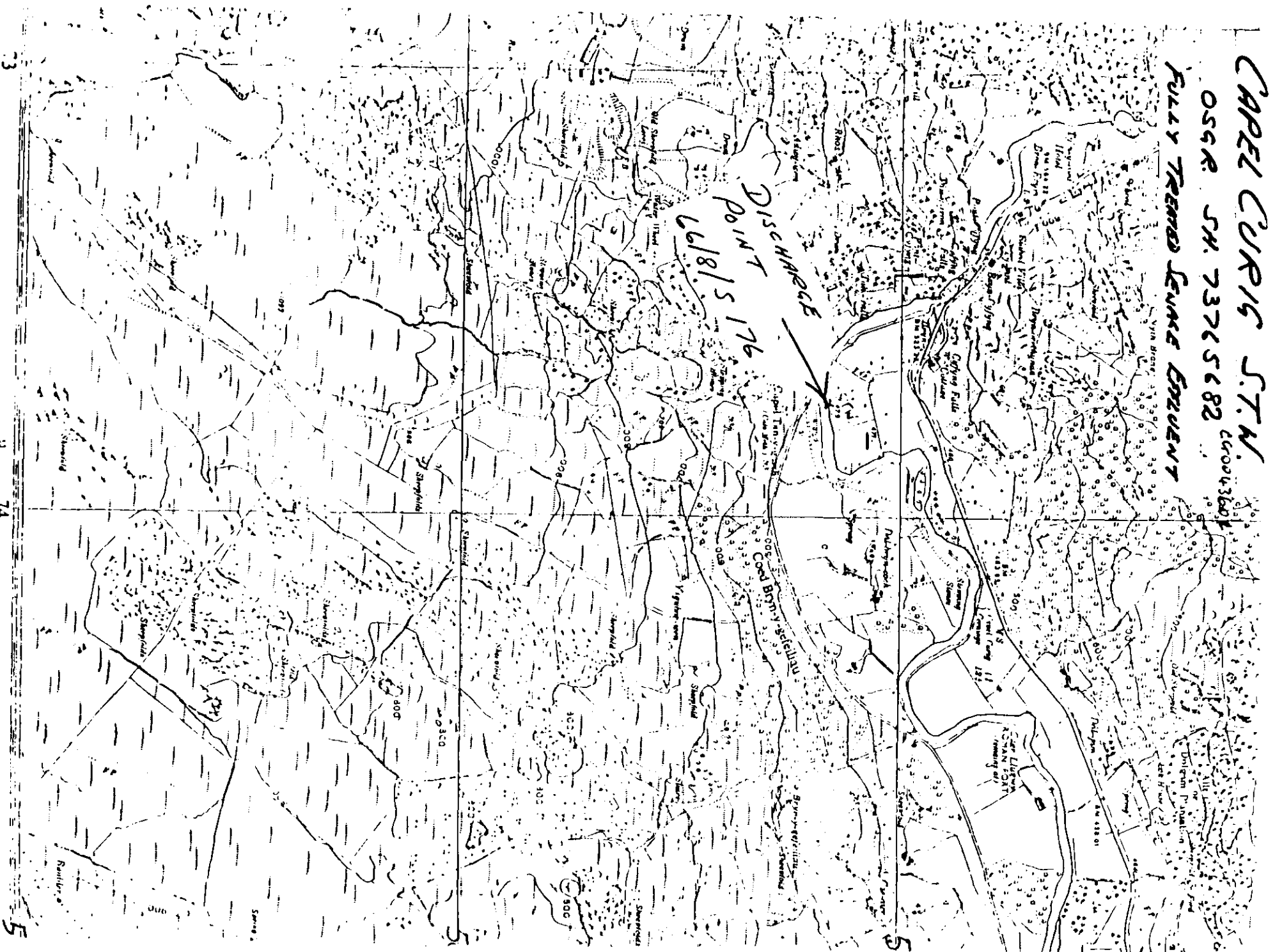
WELSH WATER AUTHORITY		welsh Office Form COPA4		Welsh Off Ref																	
SUPPORTING INFORMATION FOR CONSENT/REVIEW - WWA Form SS.SI.1				Welsh W A Ref		CG0043601															
DISCHARGER +Agent		WELSH WATER AUTHORITY				WWA District		N / W													
PREMISES / SOURCE Address/Location		CAPEL CURIG STW																			
DISCHARGE TYPE		FULLY TREATED SEWAGE EFFLUENT,																			
DISCHARGE STATUS		New reqg Consent		Exg reqg Review <input checked="" type="checkbox"/>		Exg reqg Consent		Prevly Exempt		Tempy until											
CONSENT / REVIEW EXISTING - issued		To: WELSH WATER AUTHORITY				By: WELSH OFFICE				Date: 29/8/1981											
ADVERTISEMENT ?		Yes / No because:																			
OUTLET DETAILS		XXXXXXXXXX / Exg		OS Ref SH7376 5682		Diam		mm		Form											
SAMPLING POINT		TDIB SPT		OS Ref		Outlet /															
DISCHARGE IS TO		Inland Stream <input checked="" type="checkbox"/>		Landl.Pond		Onto Land		Into Land		Groundwtr		Estuary		Coastal							
RECEIVING WATER		Immediate / Main		LLUGWY / kms >																	
Water in current RQO Programme ?		Data for :		Current Situath		Short-term RQO			Long-term RQO			TDIB SPT Refs									
Immed. Yes / No		Assessed by :		NWC		Biol		NWC		Biol		by		NWC		Biol		by		Up / Down	
Main Yes / No		Immed. Up / Down		1B/1B		/		/		/		19		1A/1A		/		19		25006 / 25006	
		Main Up / Down		/		/		/		/		19		/		/		19		/	
USE(S) OF THE RECEIVING WATER, whether surface or groundwater		Exg / Future Use(s)		PotWS		IndWS		AgrWS		Stock		SalFish		CrsFish		WSports		VisAmen		Other	
		Of Immed R.W. @ km								0		0						0			
		Of Main R.W. @ km																			
		Effect of discharge on uses, etc.																			
EFFLUENT QUALITY DATA - derived from: 23 samples taken from: 11/5/77 to : (mg/l except pH)		Determinand		BOD		S.S.		AMM.N													
		Maximum		48		41		14													
		Minimum		2		5		0.5													
		Mean		17.1		21.8		4.6													
		Standard Deviation		11.28		10.62		3.48													
		Median / 50%ile		17		20		3.2													
		95%ile: M / LN / MAX		49.1(1n)		39.3(n)		14.7(1n)													
QUALITY LIMITS (mg/l except pH) S/W if seasonal 1/2 if phased		Existing		50		40															
		Proposed 95%ile		DESCRIPTIVE CONSENT																	
		Proposed Maximum																			
		Application																			
CALCULATION MODE		To Quality Spec'n																			
		Method used																			
EFFLUENT FLOW DATA		P Popul'n No.		G Consum'n m³/h/d		PG Sewage m³/d		I Infilt'n m³/d		E Trade m³/d		PG+I+E DWF m³/d		Storm Sewage Of flow Weir Setting x DWF		1/sec		Maximum Rate 1/sec		Maximum Daily Vol m³/d	
Existing Design																					
MAX Estd Current		100										70						2.4		210	
Proposed Design																					
Ultimate Design																					
Design Horizons: Proposed: Ultimate:		Sewerage system is % combined		Flow values for Consent Conditions		Existing		Proposed		70								2.4		210	

SUPPORTING INFORMATION FOR A CONSENT / REVIEW (CONTINUED) Form SS.SI.1						Welsh Off Ref	
Relating to: CAPEL CURIG						Welsh W A Ref CG0043601	
RIVER AND EFFLUENT FLOWS AND DILUTIONS			Flows in Immediate Receiving Water			Flows in Main Receiving Water	
Flows in m ³ /d. If estimated, give method:			Meas / Estd at OSGR:			Meas / Estd at OSGR:	
CATCHMENT COMPARISON			Minimum	5%ile	Mean	Minimum	5%ile
Effluent Statistic	Source of Data	Effluent Volume	33700				
Dilution Ratios - expressed as x River : 1 Effluent							
D.W.F.	Meas / Estd	70		481			
Maximum	Meas / Estd						
RIVER REGIME	Width, Depth & Reaeration	W	m	D	m	R	W m D m R
TREATMENT PLANT UNITS - with Critical Dimensions					Primary Sett.	Area m ²	✓
Unit	Detail	Existing	Proposed	Ultimate	Storm Tanks	Area m ²	✓
Storm S. O'flow	Set @ 1/s				" "	Volume m ³	
Screens	Space mm	✓			Septic Tank	Volume m ³	
Well Retent'n.	Hours				Biol. Filters	Media m ³	✓
Pumping Rate	Max. 1/s				Act'd. Sludge #	Volume m ³	
Gravity Feed	Yes / No				Package Plant*	Surface m ²	
Flow Meas't.*	Yes / No				Pasveer Ditch#	Volume m ³	
Grit Removal	Yes / No				Final Sett't.	Area m ²	✓
Macer'n/Comm'n.	Yes / No	✓			Tert'y Treat.*	Area m ²	
Other Units and Details	* Type # Power						
SLUDGE TREAT. AND DISPOSAL							
TRADE WASTES Types & m ³ /d	NONE						
FURTHER DATA & STATEMENT From Dist/Div.							
Additional conditions Nearby efflts and changes EC Dangerous Substances EC Designated Waters SSSIs (Continue on Form SS.SI.2 if necessary)							
CAPITAL WORKS	Outline Appra		Second Appra		Final Appra		Start Finish
District Ref	66/8/S176		District Contact	R.P. DALE		HQWQS Ref	
For use by: HQ WATER QUALITY SECTION							
For use by: WELSH OFFICE							

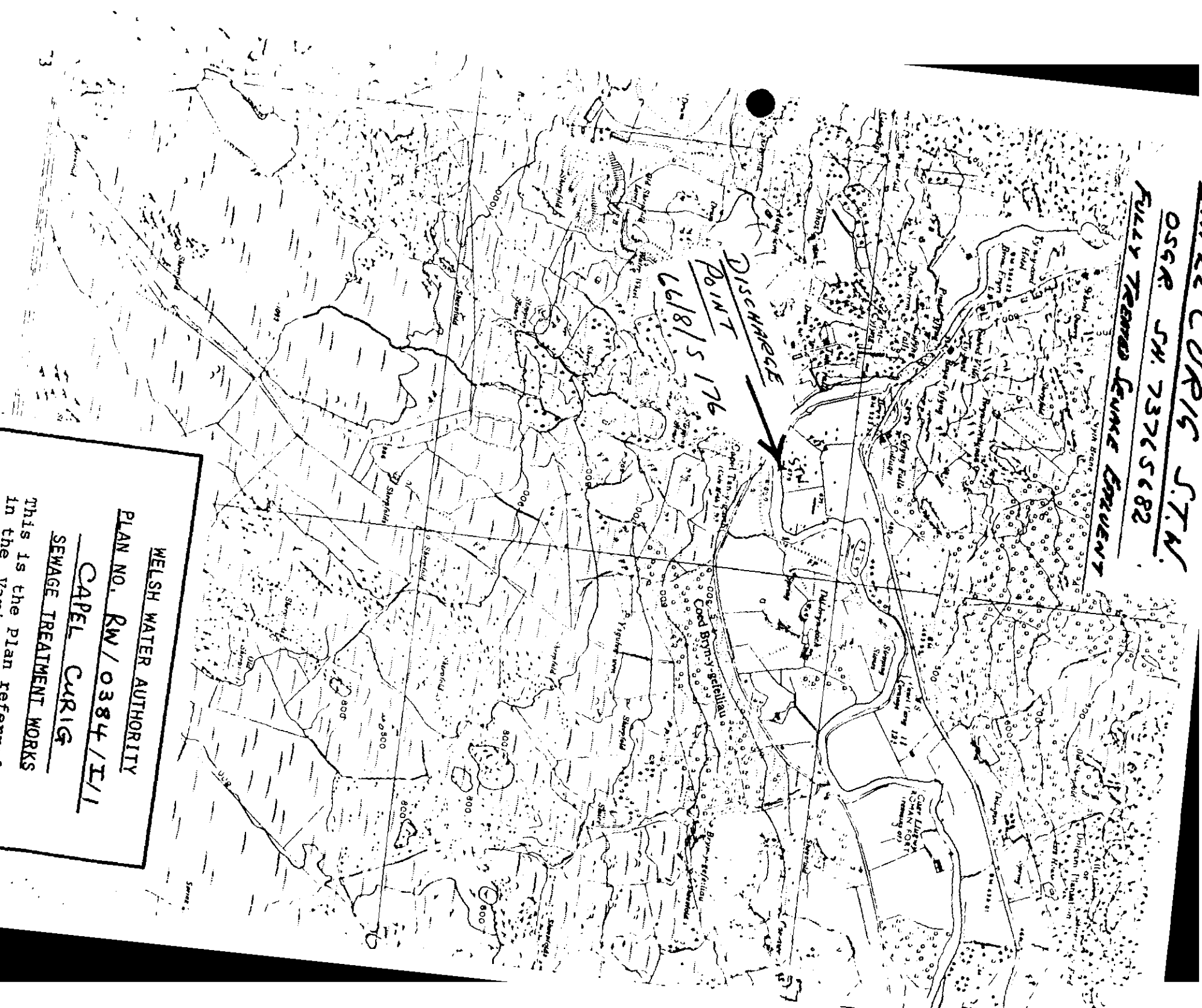
CAPEL CURRIG S.T.W.

OSGR. SH. 73765682 66004360

FULLY TRENED LEAKE ENGLANT



CAPEL CURIG S.T.W.
OSGR. SH. 73765682
FULLY TREATED SEWAGE EFFLUENT



WELSH WATER AUTHORITY
PLAN NO. RW/0384/I/1
CAPEL CURIG
SEWAGE TREATMENT WORKS

This is the Plan referred to
in the Variation of Consent
Number RW/0384/I/1

24/96

24th September, 1964.

Minutes (Discussion of Pollution) 19th July 1964 - 1964
Great Ouse Drainage and Sewerage District, Bedford
Water Supply and Sewerage Board and its members

With reference to your application of 20th July 1964, the Ousewash River Board, in pursuance of their powers under the above Act, hereby consent to the bringing into use of a new outlet for the discharge of treated sewage effluent and the siting of a new discharge of treated sewage effluent into the Aften Luggay at a point on the left bank directly north of the house west of the sewage treatment works in Fulbourn. This is consistent with the plans numbered F/128/407A and 1/128/407B and subject to the following conditions:-

1. The volume of the discharge in any period of 24 hours shall not exceed 15,000 gallons (dry weather flow).
2. The discharge shall at no time:-
 - (a) contain more than 20 parts per million of suspended matter dried at 105° C.
 - (b) take up more than 20 parts per million of dissolved oxygen in 5 days at 20° C.
 - (c) contain any matter to such an extent as to cause the stream water to be poisonous or injurious to fish, fish spawn or food of fish.

The terms of this consent will not, without the consent in writing of the person to whom this consent is given (or his successor), be altered before the expiration of the period ending with the 1st day of ~~October~~ ~~1964~~.

3. The outlet pipe to the river, where it passes through the river bank, shall be suitably encased in a concrete or masonry headwall, such headwall to have its foundations not 2 feet below the bed of the river.
4. Suitable sampling facilities shall be provided to enable the Board's sampling officers to take samples of the treated effluent discharged before discharge with the river water.
5. (a) The sewer alongside under stream between N.H. Nos. 57 and 60A and at two points between N.H. Nos. 22 and 23 be laid so as to give not less than 2 feet cover between the bed of the stream and the top of the sewer or its concrete surround.
 (b) The sewer where it crosses the Fen Luggay between N.H. Nos. 11B and 11A, be laid so as to give not less than 2 feet of cover between the bed of the river and the top of the sewer or its concrete surround.

The Clerk,

Kours faithfully,