SETTLED STORM

P/R.

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:	*Official Use Only*
The Regional Finance Manager Environment Agency Welsh Region PO Box 425 St Mellons Business Park CARDIFF CF3 0LT	*Dist/Area Ref:* 1303 *Application No.* AF402430/ *Date Received:* 8/6/04. *Fee Received:* cheque £743.00 8 - JUN 2004

DWR CYMRU

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.

Creigiau WwTW
Welsh Water
Heol Creigiau
Creigiau
Cardiff

Post Code: **CF15 9NN**

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**)	X
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 **N/A** m^3/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	X	4. Borehole		7. Sub-Irrigation System	
2. Channel		5. Well		8. Combination of 6 & 7	
3. Culvert		6. Soakaway		9. Other (*please specify below*)	

400 mm

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

S	T	0	9	1	3	5	8	0	6	8	5

(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 [X]

Other *(please specify)* **At a sampling chamber on the discharge point**

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

(please indicate on accompanying plans)

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

None

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 [✓]

Screening in a 6 mm screen, 4.2 hrs settlement/quiescent storage followed by discharge to the receiving water.

b) Will the treatment process involve the use of any chemicals (eg ferric salts, polyelectrolytes). If yes please give details. **No**

2.6 a) On what date do you anticipate the discharge will commence? **01/07/03**

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.

2.7 a) Are there any existing consents for discharges from the premises (see note vi)? **Yes**
If yes, please give the reference numbers *(Any further information should be given in Section 5.3).*

AN0032201
AF4024801

b) Has any person had a Prohibition Notice serviced on them in respect of this site? **No**
If yes, please give the reference number.

3 SITE DETAILS

3.1 Please give the name of the relevant Planning Authority.

Cardiff

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

1. Single Dwelling	[ ]	6. Fish Farm	[ ]
2. Multiple Dwellings	[ ]	7. Mineral Workings	[ ]
3. Industrial Premises	[ ]	8. Water Services plc STW	[X]
4. Vehicle Parking Area	[ ]	9. Water Supply	[ ]
5. Commercial Premises *(please specify)*	[ ]	10. Other *(please specify)*	[ ]

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

1. Well	☐	5. River *(please give name below)*	☐
2. Borehole	☐	6. Estuary *(please give name below)*	☐
3. Precipitation (eg rain or snow)	☐	7. Coastal Water *(please give name below*	☐
4. Mains *(please state water supply company)*	☐		

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)	☐	5. Into Land	☐
2. River or Stream (non-tidal)	X	6. Onto Land	☐
3. Canal	☐	7. Directly into Groundwater	☐
4. Lake, Lock or Pond	☐	8. Coastal Water (see note vii)	☐

State name of receiving water if known:

Nant Glaswg

4.2 In the case of sub-irrigation systems, soakaways or boreholes: N/A

(a) Is any part of the system within 5 metres of the boundary of the premises? Y/N

(b) Is any part of the system within 10 metres of a watercourse? Y/N

(c) Is any part of the system within 50 metres of a borehole or spring? Y/N

(d) For wells and boreholes state dimension(s) in metres. m

(e) For sub-irrigation systems, soakaway pits, wells and boreholes, state maximum depth in metres. m

(f) For boreholes, state details of lining in metres:

(i) Depth of lining m

(ii) Depth of perforated lining m

(iii) Depth of unperforated lining m

(g) A percolation test must be carried out in accordance with British Standard BS6297:1983. Have the results been provided? Y/N

4.3 Is there a foul sewer available to which the discharge(s) could be made (see note viii)? N/A 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): 236677

(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

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 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 true to the best of our knowledge, information and belief and 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 we will pay any annual charges due should a consent be granted - YES. If no please indicate who will be completing section 5.2 above (see note xiv).

SIGNED: ..... **PRINT NAME:** LEWIS KEIL

ON BEHALF OF: DWR CYMRU CYF **DATED:** 7/6/04

CONFIDENTIALITY

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

SETTLED STORM

ASIANTAETH YR AMGYLCHEDD
ENVIRONMENT AGENCY

ANNEXE 2
SEWAGE EFFLUENT DISCHARGED IN STORM OR EMERGENCY CONDITIONS

Please complete this annexe if you are proposing to make a discharge of sewage in emergency or storm conditions (if the effluent is to contain a trade component Annexe 3 should also be completed).

Official Use Only
Application No.

1. Site Name.

Creigiau Waste Water Treatment Works

2. State the type of discharge - tick as appropriate:

Storm tanks	X
Combined Sewer Overflow from sewerage system	
Combined Sewer Overflow from pumping station	
Emergency overflow from sewerage system	
Emergency overflow from pumping station	
Other *(please specify)*	

The flow will be screened to 6 mm at the works inlet prior to discharge into the storm tanks

3. For effluents discharging from sewage treatment works, is the storm/emergency effluent discharged via the same outlet as the treated effluent? **Yes**

If no please give: a) the National Grid Reference of the treated effluent outlet.

b) the consent or application number covering the treated effluent discharge

AN0032201

If yes please give the National Grid Reference of the storm/emergency sampling point (see notes)

S	**T**	**0**	**9**	**1**	**3**	**5**	**8**	**0**	**6**	**8**	**5**

4. For effluents discharging from combined sewer overflows, is the discharge via a dedicated pipe? Y/N

If no please give the National Grid Reference of the overflow into the sewer.

5. Overflow settings

a)	Overflow setting to storm tanks	**25.7 l/s**
b)	Maximum flow to storm tanks SOCA - FFT	35.8 l/s
c)	Overflow setting to storm sewage overflow	**l/s**
d)	Maximum flow to storm sewage overflow	**l/s**

6. Storage capacity

a)	Volume of Storm tanks	**390 m³**
b)	Retention time of storm tanks at ~~maximum flow~~ (FFT)	**4.2 hours**
c)	Storage capacity of sewer/wet well	**m³**

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

BVCL calculation sheet 151331-00-1007 Rev A – Storm Tank

8. Will facilities be provided to raise alarms (eg telemetry)? **No**
If yes, please give details.

9. Will facilities be provided to prevent the discharge of gross solids? **Yes**
If yes, please give details (for screens give bar spacing or aperture).

6 mm mechanical screen and perforated sack screen on storm outlet

10. What provisions will be made to deal with:

a) power failure (eg standby generators)?

Not required

b) mechanical breakdown (eg standby pumps)?

Not required

c) rising main failure?

Not required

d) tanker access?

Not required

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.

SETTLED STORM

ASIANTAETH YR AMGYLCHEDD
ENVIRONMENT AGENCY

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.

Creigiau Waste Water Treatment Works

2. Is this application being made to reinstate a lapsed Consent? **No**

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):

400 mm

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

£ 498.000

5. Is there any trade effluent component in the proposed discharge? **No**

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) **Gravity**

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

8. Please state:

Population served (head)	**3088**
Consumption (l/head/day) default = 180	**180**
Infiltration (m^3/day)	**556**
Industrial effluent flow (m^3/day)	**0**
Dry Weather Flow (m^3/day)	**1112**
Soc A (l/sec)	**61.5**
Predicted spill frequency (per annum)	**Not known**

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.**

Calculations

Document Number : 151331-00-1007

Title : Storm tank

Tag No.

Client : DCWW

Contract Title : Creigiau

Contract Number : 1331

Rev	Date	Revision Description	Pages	Prepared	Checked	Approved
A	01/07/2003	Storm tanks	2	PRC	PJW	

Reason for Issue

- ☐ **For Enquiry**
- ☑ **For Information**
- ☐ **For Construction**
- ☐ **For Review**
- ☐ **For Approval**

Black & Veatch Contracting Ltd.
A Black And Veatch Company
632/652 London Road,
Isleworth,
Middlesex,
TW7 4EG

Tel: 44 (0) 20-8560-5199
Fax: 44 (0) 20-8568-5479

BLACK & VEATCH

Client: DCWW	Subject: Storm Tanks Design

1. Works flows

The FFT to the works based on the population counted by Black & Veatch has been calculated as 25.7 l/s (1331-00-1002 Rev A).

FFT	=	25.7	l/s
	=	93	m3/hr
	=	2220	m3/d

2. Tank design

Based on 2 hours retention at FFT to the works the tank volume required is

Tank volume	=	2	x	93
	=	185.0	m3	

3. New Storm Tank

Number of tanks	=	1		
Tank diameter	=	12.4	m	
Tank Depth	=	3.2	m	
Tank area	=	120.8	m2	
	=	120.8	m2	per tank
Volume of each storm tank	=	390	m3	
Total capacity	**=**	**390**	**m3**	
Retention time at FFT	=	4.2	h	

Calculated by:	Checked by:	Job no:	Revision A
Pedro Curto	Peter Woollard	1331	Sheet 2 of 2

Black Veatch Contracting
632/652 London Road Isleworth, TW7 4EG.

Tel: 44 (0) 20-8560-5199
Fax: 44 (0) 20-8568-5479

P/R

ASIANTAETH YR AMGYLCHEDD CYMRU
ENVIRONMENT AGENCY WALES

Eich cyf/Your ref.

Ein cyf/Our ref. ACSC/CUST/SE/SF/AF4024801

Dyddiad/Date: 29 October 2004

Dwr Cymru
Pentwyn Road
Nelson
Treharris
Caerphilly
CF46 6YA

FILE COPY

Dear Dr. Kiel

RE: WATER RESOURCES ACT 1991, SCHEDULE 10 (AS AMENDED BY THE ENVIRONMENT ACT 1995) APPLICATION FOR VARIATION OF CONSENT TO DISCHARGE SEWAGE EFFLUENT BY DWR CYMRU FROM CREIGIAU WWWT, HEOL CREIGIAU, CREIGIAU, CARDIFF CF15 9NN
APPLICATION NO: AF4024801

Further to your application for variation, the Agency has decided that consent should be given subject to conditions 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 at Creigiau WwWt, Heol Creigiau, Creigiau, Cardiff CF15 9NN.

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. 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 for the Environment at 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 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
Plas Yr Afon, Parc Busnes Llaneirwg, Llaneirwg, Caerdydd, CF3 0EY
Ffon: 029 20770088 Ffacs: 029 20798555
www.environment-agency.gov.uk

Environment Agency Wales
Rivers House, St Mellons Business Park, St Mellons, Cardiff, CF3 0EY
Tel: 029 20770088 Fax: 029 20798555
www.environment-agency.gov.uk

If you have any queries regarding the enforcement of this consent, please do not hesitate to contact Emma Harris, Regulatory Water Quality, Environment Agency Wales.

Yours sincerely

GARY INIGHT
External Relations Team Leader

CONSENT NO.	AF4024801

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 Cyfyngedig
Pentwyn Road
Nelson
Treharris
CF46 6LY

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:

Settled Storm Sewage

With respect to Variation of Consent No. AF4024801 issued on the 16th day of February 1988

FROM: Creigiau Sewage Treatment Works.

AT: Heol Creigiau, Creigiau, Cardiff

TO: The Nant Glaswg.

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

Settled Storm Sewage Schedule No. AF402480101

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 and takes effect on the 15th day of October 2004

Signed .....Anne Harris.....
Team Leader Regulatory Support – Water Quality

Asiantaeth yr Amgylchedd Cymru
29 Ffordd Casnewydd, Caerdydd CF24 0TP
Ffon: 08708 506506 Ffacs: 029 20466070

Environment Agency Wales
29 Newport Road, Cardiff, CF24 0TP
Tel: 08708 506506 Fax: 029 20466070

CONSENT NO.	AF4024801
SCHEDULE NO.	AF402480101
DATE ISSUED	15 October 04

ASIANTAETH YR AMGYLCHEDD CYMRU
ENVIRONMENT AGENCY WALES

CONDITIONS OF CONSENT TO DISCHARGE

Settled Storm Sewage ("the Discharge")

FROM: Creigiau Sewage Treatment Works, Heol Creigiau, Creigiau.

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 400mm pipe;

   (b) discharging to The Nant Glaswg;

   (c) at National Grid Reference ST 09199 80405;

   (d) shown marked 'Consent Point' on Plan AF4024801 attached as Annex 1B.

SAMPLE POINT

3. An appropriately labelled sample point shall be provided and maintained at National Grid Reference ST 09134 80685, as shown marked 'Sample Point' on Plan AF4024801 attached as Annex 1A, so that a representative 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 discharging into controlled waters.

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 25.7 litres per second due to rainfall and/or snowmelt. The storm tanks shall be emptied 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 tanks shall be at least 390 cubic metres.

CONSENT NO.	AF4024801
SCHEDULE NO.	AF402480101

ASIANTAETH YR AMGYLCHEDD CYMRU
ENVIRONMENT AGENCY WALES

COMPOSITION

6. (a) The Discharge shall have passed, without prior comminution or maceration, through a screening device having apertures no greater than 6 millimetres in two 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.

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 sewerage system 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.	AF4024801
SCHEDULE NO.	AF402480101

ASIANTAETH YR AMGYLCHEDD CYMRU
ENVIRONMENT AGENCY WALES

SUBSTANTIAL CHANGE

10. 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.

11. A discharge of trade effluent into the works is new if -

    (a) 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 variation; or

    (b) it is made by a third party and the discharge is authorised on or after that date.

12. A discharge of trade effluent into the works is altered if -

    (a) it is made by the sewerage undertaker and its composition or quantity changes significantly on or after the date of effect of this variation; or

    (b) it is made by a third party and the alteration of the discharge is authorised on or after that date.

13. 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.

14. For the purposes of this condition "trade effluent" means -

    (a) any discharge by the sewerage undertaker other than

        (i) domestic sewage from premises connected directly or indirectly to the works; or

        (ii) surface water run-off;

    (b) any discharge by a third party which is authorised under Chapter III of Part IV of the Water Industry Act 1991 or which is accepted as a result of a contract with the sewerage undertaker.

CONSENT NO.	AF4024801
SCHEDULE NO.	AF402480101

ASIANTAETH YR AMGYLCHEDD CYMRU
ENVIRONMENT AGENCY WALES

UNAUTHORISED DISCHARGES

15. 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.

(a) 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.

(b) 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.

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 outside range 5.5 to 9.0	35.	*Boron
36.	Vanadium	37.	PCSD'S
38.	Cyfluthrin	39.	Sulcofuron
40.	Flucofuron	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.

Dŵr Cymru Welsh Water

Creigiau STW

N

May 14 2004

SAMPLE POINT

Water Resources Act
Urban Waste Water
Final Effluent Sample Point
ST 09133 80685

Water Resources Act
Settled Storm Effluent
Sample Point
ST 09134 80685

Tank

Sewage Works

VC 300 mm

SPC

SPC

Urban Waste Water
Raw Water Sampling Point
ST 09061 80686

ANNEX 1A

ASIANTAETH YR AMGYLCHEDD ENVIRONMENT AGENCY	
CONSENT PLAN NUMBER	AF 4024 801
AUTHORISED SIGNATURE	Emma Harris

Legend:
Foul
Surface
Combined
Rising Main
Private
Treatment Works
Pumping Station
Combined Overflow
Special/Purpose Chamber
Unknown End
Outfall
Lamphole
Map Edge

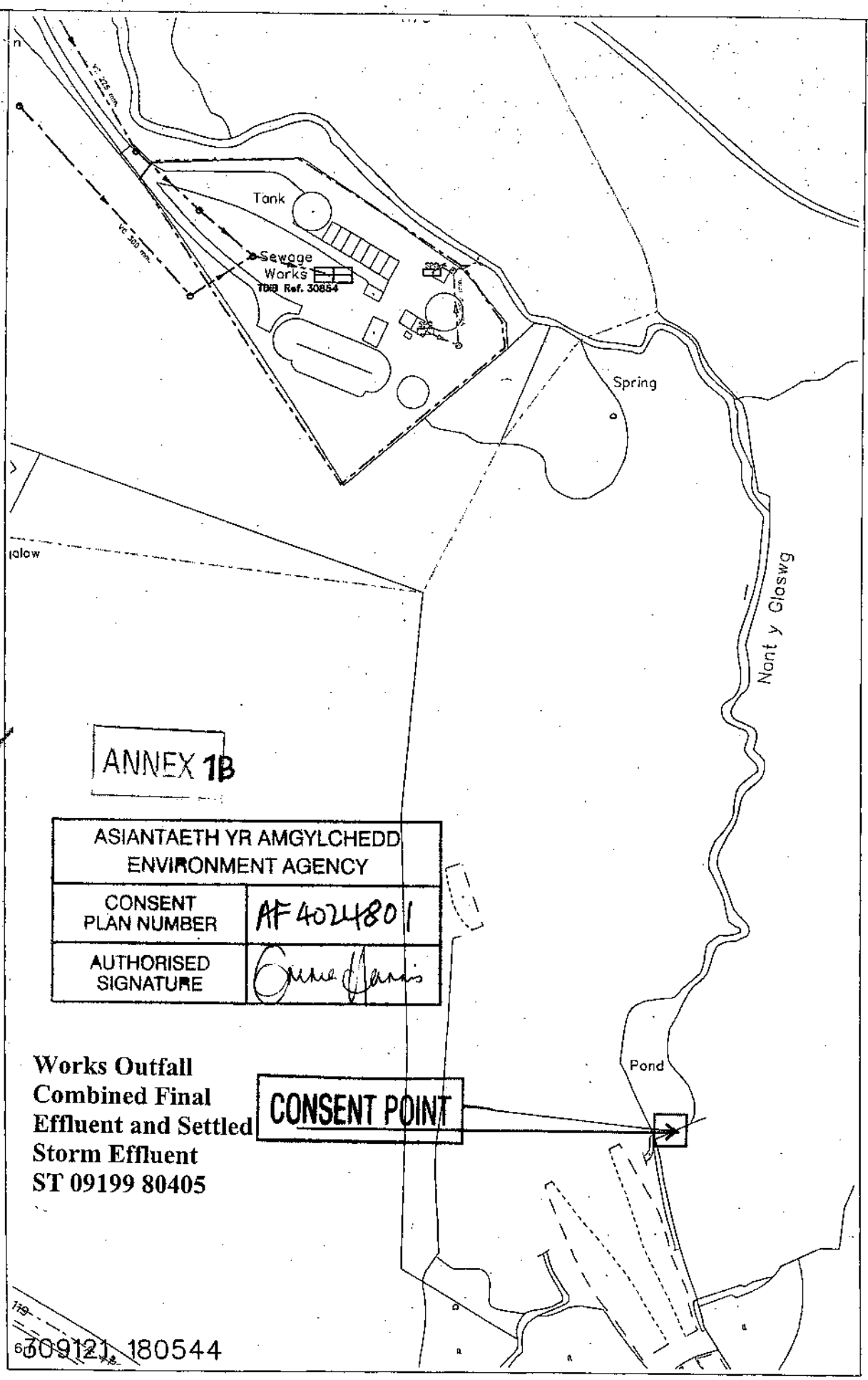
ST 09078, 180674

Dwr Cymru Cyf gives this information as to the position of its underground apparatus by way of general guidance only on the strict understanding that its accuracy is not warranted and no warranty as to its correctness is relied upon in the event

EXACT LOCATIONS OF ALL APPARATUS

Reproduced from the Ordnance Survey's maps with the permission of the Controller of Her

Scale: 1:700



Creigiau STW - Works Outfall

Sep 15 2004

Scale: 1:1750

Dwr Cymru Cyf gives this information as to the position of its underground apparatus by way of general guidance only on the strict understanding that it is based on the best information available and no warranty as to its correctness is relied upon in the event of excavations or other works made in vicinity of the Companys apparatus and any cost of locating the apparatus before carrying out any excavations rests entirely on you. It must be understood that the furnishing of this information is entirely without prejudice to the provision of the New Roads and Street Works Act 1991 and all the Companys right to be compensated for any damage to its apparatus.

Service pipes are not generally shown but their presence should be anticipated.

EXACT LOCATIONS OF ALL APPARATUS TO BE DETERMINED ON SITE.

Reproduced from the Ordnance Survey's map with the permission of the Controller of Her Majesty's Stationery Office © Crown Copyright.

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 AF4024801

Nature of Discharge(s); SEWAGE EFF/STORM EFF/RAINFALL
at CREIGIAU STW - STORM TANK

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)

JWE/5/96

RECYCLED

Please Return this form to:

Consents Officer.
N.R.A. Welsh Region,
FREEPOST
Rivers House,
St.Mellons Business Park,
St.Mellons,
Cardiff,
Glamorgan
CF3 7ZZ.

For office use only:

Reference No.: AF4024801

Reply Received : 17/12/90.

Action : A 23-1-91 ✓

25/1/91

Our records contain the following consent details :

Name and Address Of Owner:

Dwr Cymru Cyfyngedig
Plas Y Ffynnon,
Cambrian Way,
Brecon,
Powys Ld3 7hp

Please Indicate Changes:

Consent No.: **AF4024801** **Operative Date :** **16TH FEBRUARY 1988**

Is this discharge still in operation ? **YES** [✓] **NO** [ ]

If NO, do you wish this consent to be revoked ? **YES** [ ] **NO** [ ]

If you wish this consent to be revoked, please sign here :
This discharge is not in operation. I wish this consent to be revoked.

Signed : _____ Date : _____

If you do not wish this consent to be revoked, please verify the details which follow and supply further details if known.

Address of premises
Location of discharge :

Please Indicate Changes:

Creigiau Stw - Storm Tank

Storm Water Overflow

Outlet National Grid Reference : ST 09150 80670

Population Served : _____

Is discharge periodic or continuous? **Periodic** [✓] **Continuous** [ ]

Discharge Consent Conditions :

Condition Name	Limit Unit	Ind

Other Details.

Note: If the discharge has changed in composition or volume since the consent was issued, then please indicate the changes above.

If you wish future bills to be sent to a name and address other than that shown at the top of the previous page then please complete the details here.

Please give a contact name and telephone number here.

Signed : S.H. Lewis Date: 12-12-90

AF4024801

WEPD/OD/46/D7

WO REF WEP/WS 9113/9

WELSH OFFICE

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

WHEREAS

1. The WELSH WATER AUTHORITY (hereinafter referred to as 'the Water Authority') proposes to discharge storm tank effluent from the Creigiau Sewage Treatment Works to the Nant Glaswg at national grid reference ST 0915 8067 as shown on the attached plan.

2. The proposals require the consent of the Secretary of State for WALES in pursuance of sections 34 and 55 of the Control of Pollution Act 1974 as modified by the Control of Pollution (Discharges by Authorities) Regulations 1984 (hereinafter referred to as 'the Regulations').

3. In accordance with the provisions of Regulation 2 of the Regulations the Water Authority have submitted the proposals to the Secretary of State in the form of an application for consent dated 31 July 1987.

THE SECRETARY OF STATE FOR WALES hereby consents to the proposed discharge subject to the conditions specified in the Schedule hereto attached.

Signed .....

On behalf of the Secretary of State for Wales

Dated this 16 day of February 1988

SCHEDULE

Conditions prescribed for the discharge of settled storm sewage from the Creigiau Sewage Treatment Works to the Nant Glaswg at Grid Reference ST 0915 8067

"Sewage" can mean domestic sewage alone or in admixture with industrial waste water(s).

1. The effluent discharged shall consist only of settled storm sewage.

2. The sewage at all flow rates into the plant between 1858 cubic metres per day (21.5 litres per second) and 2800 (assumed maximum flow) cubic metres per day (32.4 litres per second) shall receive settlement. The period of settlement shall not be less than 11 hours at the maximum rate of flow into the storm tank(s) (being the difference between the two flow rates quoted above) and the rise rate in the tank(s) (being the maximum flow rate divided by the tank(s) cross-sectional area at the water surface) shall not be greater than 0.34 metres per hour.

3. As soon as is practicable after cessation of storm sewage flows into the tank(s), the tank(s) contents shall be discharged for biological treatment and the tank(s) cleaned. Under no circumstances shall the tank contents be allowed to remain in the tank(s) until such time as advanced anaerobiosis or large visible algae growths occur.

4. A copy of this consent, suitably protected against the weather shall be posted within the site of the works. Further copies shall be posted as and when required to maintain effective notice of the consent on the site of the works.

16. 2. 88

WELSH WATER AUTHORITY	Welsh Office Form 55.51.1	Welsh Off Ref	
SUPPORTING INFORMATION FOR CONSENT/REVIEW - WWA Form 55.51.1		Welsh W A Ref	[illegible]

DISCHARGER (Agent)	WELSH WATER AUTHORITY	WWA District	SE /
PREMISES / SOURCE Address, Location	PRESCIAU SEWAGE TREATMENT WORKS, PRESCIAU, MID GLAMORGAN.		
DISCHARGE TYPE	FULLY TREATED SEWAGE EFFLUENT AND STORM SEWAGE		

DISCHARGE STATUS	New reqg Consent	Exg reqg Review ✓	Exg reqg Consent	Prevly Exempt	Temp y until

CONSENT / REVIEW EXISTING - Issued	To: WELSH WATER AUTHORITY	By: WELSH OFFICE	Date: 30/1/85
ADVERTISEMENT ?	Yes/No because: No change in existing discharge type		

OUTLET DETAILS	New/Altered / Exg	OS Ref	ST 0915 8067	Diam	305 mm	Form	Pipe in headwall
SAMPLING POINT	TDIB SPT 16092	OS Ref	ST 0915 8067	Outlet / From tertiary treatment units and storm			

DISCHARGE IS TO	Inland Stream ✓	Land Pond	Onto Land	Into Land	Groundwtr	Estuary	Coastal

RECEIVING WATER	Immediate / Main	Afon Glasrug/River Ely / kms > 4									
water in current	Data for :	Current Situath		Short-term RQO			Long-term RQO			TDIB SPT Refs	
QQ Programme ?	Assessed by :	NWC	Biol (a)	NWC	Biol	by	NWC	Biol	by	Up	/ Down
Immed. Yes/No	Immed. Up / Down	1B/2A	/	1B/1B	/	19	1B/1B	/	2001	68076	/ 68077
Main Yes / No	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. 3 km				0.5	0.0	0.0			
	Of Main R.W. 3 km		10.1							
	Effect of discharge on uses, etc.	No effect on downstream uses except when emergency discharge taking place								

EFFLUENT QUALITY DATA - derived from: 40 samples taken from: 03/06/85 to : 15/01/87 (mg/l except pH)	Determinand	BOD ATU	NH_3	T.S.S.			
	Maximum	18.5	59	29			
	Minimum	0.5	0.4	3.0			
	Mean	3.5	3.0	11.5			
	Standard Deviation	2.9	9.8	6.3			
	Median / 50%ile	3.5	3.0	11.5			
	95%ile: XX/ LN / XR	8.3	5.3	24			
QUALITY LIMITS (mg/l except pH) S/W if seasonal 1/2 if phased	Existing	22	NO LIMIT	31			
	Proposed 95%ile	3.0	4.7	90			
	Proposed Maximum						
	Application						
CALCULATION MODE	To Quality Spec'n	5.0	1.34 (d)	58 (e)			
	Method used	Warm Brew with sensitivity testing					

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 Oflow Weir Setting x DWF	Storm Sewage Oflow Weir Setting l/sec	Maximum Rate l/sec	Maximum Daily Vol m³/d (c)
Existing Design						545 (b)				
Meas Recent Current	1877	0.160	300.3	60	NIL	360 (c)	5.17	21.5	21.5	1861
Proposed Design										
Ultimate Design	2599	0.160	416	93	NIL	509 (c)	3.66	21.5	21.5	1861
Design Horizons: Proposed: ultimate: 2001	Sewerage system is 20% combined		Flow values for Consent Conditions		Existing	545			19	1636
					Proposed	545			21.5	1861 (c)

SUPPORTING INFORMATION FOR A CONSENT / REVIEW (CONTINUED) Form SS.SI.1	Welsh Off Ref	
Relating to: TREDIA W.T.W.	Welsh W A Ref	

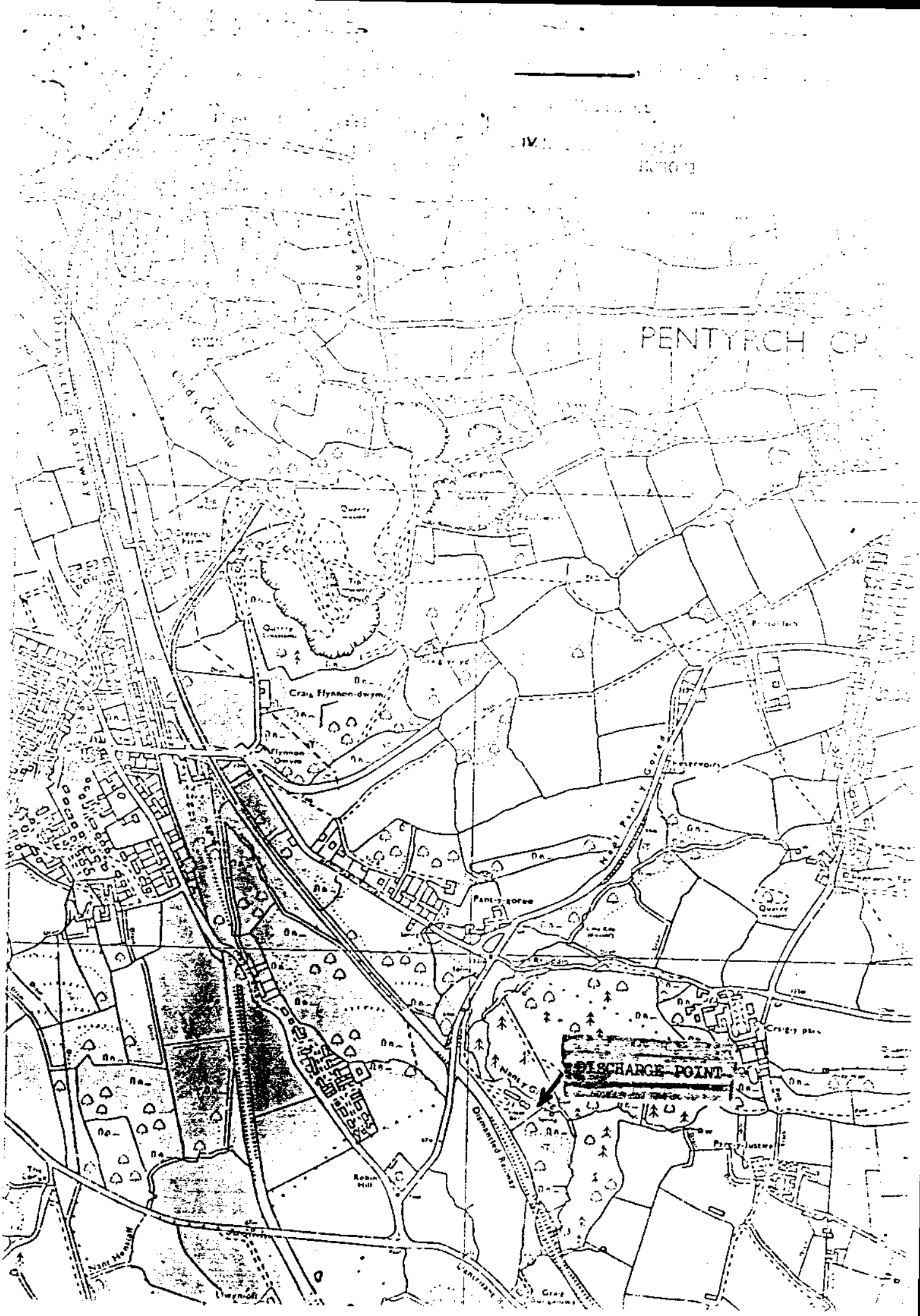
RIVER AND EFFLUENT FLOWS AND DILUTIONS			Flows in Immediate Receiving Water			Flows in Main Receiving Water		
Flows in m³/s. If estimated, give method:			Measured at OSGR: ST 3915 1567			Meas / Estd at OSGR:		
River spot gaugings on several occs			Minimum	5%ile	Mean	Minimum	5%ile	Mean
Effluent Statistic	Source of Data	Effluent Volume		[illegible]	[illegible]			
			Dilution Ratios - expressed as x River : 1 Effluent					
D.W.F.	Meas / ~~Estd~~	360		0.36	22.4			
Maximum	Meas / ~~Estd~~	1861		0.07	[illegible]			
RIVER REGIME	Width, Depth & Reaeration		W m	D m	R [illegible]	W m	D m	R

TREATMENT PLANT UNITS - with Critical Dimensions									
Unit	Detail	Existing	Proposed	Ultimate	Primary Sett. Area	m²	N/A		
Storm L Overflow*	Set @ l/s	21.5		21.5	Storm Tanks Area	m²	113		
					" " Volume	m³	433		
Screens	Space mm	[illegible]			Septic Tank Volume	m³	N/A		
l Retentn.	Hours	N/A			Biol. Filters Media	m³	N/A		
Pumping Rate	Max. l/s	25			Acti'd. Sludge # Volume	m³			
Gravity Feed	Yes / No				Package Plant* Surface	m²			
Flow Meas't.*	Yes / No				Pasveer Ditch* Volume	m³	784		
Grit Removal	Yes / No	Dorr Settler			Final Sett't. Area	m²	75.4	Volume [illegible] m3	
Macerator	Yes / No	Both		Both	Tert'y Treat.* Area	m²	57.3		
Other Units and Details	* Type # Power	Tertiary Treatment 2 tanks 4.57 m x 4.57 x 4.65 deep. Pyramidal with tiles (upward flow) plus two tanks 3.95 x 1.98 x Average 0.9 deep upward flow. Flow split 50:50 to tertiary treatment.							

SLUDGE TREAT. AND DISPOSAL	Tankered off site
TRADE WASTES Types & m³/d	None
FURTHER DATA & STATEMENT m Dist/Div. Additional conditions Nearby effl's and changes EC Dangerous Substances EC Designated Waters SSSIs (Continue on Form SS.SI.2 if necessary)	See attached additional notes

CAPITAL WORKS	Outline Approl	Second Approl	Final Approl	Start	Finish
District Ref	SS 71	District Contact	D. H. Williams	HQWOS Ref	
For use by: NW WATER QUALITY SECTION					
For use by: WELSH OFFICE					

DHM.srt.2.0586


PENTYRCH CP
Railway
Craig Ffynnon-dwym
Ffynnon Dwym
Pant-y-gorse
Reservoir
Quarry
Craigy-pant
DISCHARGE POINT
Dismantled Railway
Robin Hill
Llwynhir
Llantrisant
Pant-y-llwchwr